

FINDING OF NO SIGNIFICANT IMPACT FOR CONSTRUCT MISCELLANEOUS SERVICES RECREATION AREA

AGENCY: Department of the Air Force

PROPOSED ACTION (Construct Miscellaneous Services Recreation Area): Under this alternative, Grand Forks Air Force Base (AFB) would construct a miscellaneous services recreation area in the previous Dakota Military Family Housing (MFH) that could be used for paintball. Houses have been removed but roads and foundations still exist. No roads, trees, or concrete would be removed. A contractor prepare the field including barricade construction and weed removal. The area would be fitted with signs stating “entry or trespassing on this property has to be authorized through outdoor recreation or security forces”. The field would be fitted with movable objects and walls that could be set up and taken down easily.

ALTERNATIVES CONSIDERED: Under the second alternative, Grand Forks AFB would construct the miscellaneous services recreation area between the Bike Motocross track and Holly MFH. This is not a viable alternative due to proximity to MFH and other structures such as building, cars, and MFH occupants. The no action alternative would not construct a miscellaneous services recreation area on Grand Forks AFB. Personnel and dependents would be required to find alternative recreational areas.

ENVIRONMENTAL CONSEQUENCES:

Air Quality - Air Quality is considered good and the area is in attainment for all criteria pollutants. The Material Safety Data Sheet indicates that paintballs contain non-hazardous material, are water soluble and biodegradable.

Noise - The people utilizing paintball guns would create additional noise. The increase in noise would be negligible and only occur when the area was being used.

Wastes, Hazardous Materials, and Stored Fuels - The increase in hazardous and solid wastes from construction related activities would be minimal and temporary. Construction debris would be disposed of in approved location, such as the Grand Forks Municipal Landfill.

Water Resources – Provided best management practices (BMPs) are followed, there would be minimal impacts on ground water, surface water, water quality, and wetlands. The proposed action would not impact wastewater.

Biological Resources –BMPs would be required to prevent the spread of noxious weeds, minimize soil erosion, and promote the establishment of native plant species.

Socioeconomic Resources –Secondary retail purchases would make an additional contribution to local communities. Implementation of the proposed action would provide a short-term, beneficial impact to local contractors and retailers during the construction phase of the project.

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14. ABSTRACT This Final EA has been prepared in accordance with the National Environmental Policy Act, and assesses the potential environmental impacts of constructing miscellaneous services recreation area on Grand Forks AFB, located in Grand Forks County, North Dakota. Resource areas analyzed in the EA include Air Quality; Noise; Wastes, Hazardous Materials, and Stored Fuels; Water Resources; Biological Resources Socioeconomic Resources; Cultural Resources; Land Use; Transportation Systems; Airspace/ Airfield Operations; Safety and Occupational Health Environmental Management; and Environmental Justice. In addition to the Proposed Action, the Alternative Action, and the No Action Alternative were analyzed in the EA. The EA also addresses the potential cumulative effects of the associated construction activities along with other concurrent actions at Grand Forks AFB and the surrounding area.					
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Cultural Resources - The proposed action has little potential to impact cultural resources. In the unlikely event any such artifacts were discovered during the construction activities, the contractor would be instructed to halt construction and immediately notify Grand Forks AFB civil engineers who would notify the State Historic Preservation Officer.

Land Use - Siting for the proposed action has been approved by the Facility Board.

Transportation Systems - The proposed construction would have a minor adverse impact to transportation systems on base due to vehicles traveling to and from the recreation site.

Airspace/Airfield Operations - The proposed action would not impact aircraft safety or airspace compatibility.


Safety and Occupational Health – The Grand Forks AFB Safety Office has indicated they have safety concerns regarding siting of the miscellaneous services recreation area although they have not indicated what those concerns are. The site would be cleaned up prior to utilization to minimize safety hazards.

Environmental Management – The proposed action would not impact IRP Sites. BMPs would be implemented to prevent erosion. No pesticides would be used as part of this project.

Environmental Justice - There are no minority or low-income populations in the area of the proposed action or alternatives, and, thus, there would be no disproportionately high or adverse impact on such populations.

No adverse environmental impact to any of the areas identified by the AF Form 813 is expected by the proposed action, Construct Miscellaneous Services Recreation Area.

CONCLUSION: Based on the Environmental Assessment performed for Construct Miscellaneous Services Recreation Area, no significant environmental impact is anticipated from the proposed action. Based upon this finding, an Environmental Impact Statement is not required for this action. This document and the supporting AF Form 813 fulfill the requirements of the National Environmental Policy Act (NEPA), the Council of Environmental Quality (CEQ) regulations implementing NEPA, and Air Force Instruction 32-7061, which implements the CEQ regulations.



WAYNE A. KOOP, R.E.M., GM-13
Environmental Management Flight Chief

Date: 15 MAR 04

Final

Environmental Assessment

CONSTRUCT MISCELLANEOUS SERVICES RECREATION AREA

**At
Grand Forks AFB, North Dakota**

8 Jan 04

Cover Sheet

Agency: United States Air Force (USAF)

Action: The action proposes to construct miscellaneous services recreation area at Grand Forks Air Force Base (AFB), North Dakota.

Contacts: 319 CES/CEVA
525 Tuskegee Airmen Boulevard (Blvd)
Grand Forks AFB, ND 58205

Designation: Final Environmental Assessment (EA)

Abstract: This Final EA has been prepared in accordance with the National Environmental Policy Act, and assesses the potential environmental impacts of constructing miscellaneous services recreation area on Grand Forks AFB, located in Grand Forks County, North Dakota. Resource areas analyzed in the EA include Air Quality; Noise; Wastes, Hazardous Materials, and Stored Fuels; Water Resources; Biological Resources; Socioeconomic Resources; Cultural Resources; Land Use; Transportation Systems; Airspace/Airfield Operations; Safety and Occupational Health; Environmental Management; and Environmental Justice.

In addition to the Proposed Action, the Alternative Action, and the No Action Alternative were analyzed in the EA. The EA also addresses the potential cumulative effects of the associated construction activities along with other concurrent actions at Grand Forks AFB and the surrounding area.

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ACRONYMS, ABBREVIATIONS, AND TERMS

AAM	Annual Arithmetic Mean
ACM	Asbestos Containing Material
AFB	Air Force Base
AFI	Air Force Instruction
AICUZ	Air Installation Compatible Use Zone
AMC	Air Mobility Command
APZ	Accident Potential Zone
ARPA	Archeological Resource Protection Act
ARW	Air Refueling Wing
Ave	Avenue
BASH	Bird Aircraft Strike Hazard
Blvd	Boulevard
BMP	Best Management Practice
BMX	Bike Motocross
CAA	Clean Air Act
CWA	Clean Water Act
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
dBa	Decibel
DNL	Day-Night Average A-Weighted Sound Level
EA	Environmental Assessment
EIAP	Environmental Impact Analysis Process
EIS	Environmental Impact Statement
EO	Executive Order
EPCRA	Emergency Planning and Community Right-to-Know Act
ESA	Endangered Species Act
F	Fahrenheit
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
ft	Feet
ft ³ /s	feet cubed per meter
HAP	Hazardous Air Pollutants
hr	Hour
H ₂ S	Hydrogen Sulfide

IRP	Installation Restoration Program
LT	Long-Term
MBTA	Migratory Bird Treaty Act
MFH	Military Family Housing
mph	Miles Per Hour
MSDS	Material Safety Data Sheet
MSL	Mean Sea Level
µg/m ³	Micrograms Per Meter Cubed
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
ND	North Dakota
NDAAQS	North Dakota National Ambient Air Quality Standards
NDAC	North Dakota Administrative Code
NDDH	North Dakota Department of Health
NDPDES	North Dakota Pollutant Discharge Elimination System
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NO _x	Nitrogen Oxides
NO ₂	Nitrogen Dioxide
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRHP	National Register of Historic Places
NWR	National Wildlife Refuge
O ₃	Ozone
OSHA	Occupational Safety and Health Act
Pb	Lead
PM ₁₀	Particulate Matter 10 Microns In Diameter
PM _{2.5}	Particulate Matter 25 Microns In Diameter
POL	Petroleum Oil Lubricant
ppm	Parts Per Million
PSD	Prevention of Significant Deterioration
RACM	Regulated Asbestos Containing Materials
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
RV	Recreational Vehicle
SAGE	Strategic Air Ground Equipment
SARA	Superfund Amendments and Reauthorization Act

SO ₂	Sulfur Dioxide
SO _x	Sulfur Dioxide
St	Street
ST	Short-Term
tpy	Tons Per Year
TSCA	Toxic Substance Control Act
TSI	Thermal System Insulation
US	United States
USACE	United States Army Corps of Engineers
USAF	United States Air Force
U.S.C.	United States Code
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

EXECUTIVE SUMMARY

The United States Air Force (USAF) proposes to construct a miscellaneous services recreation area on Grand Forks Air Force Base (AFB), North Dakota.

Purpose and Need: A miscellaneous services recreation area is strongly needed by base personnel and dependents that participate in the sport of paintball. Paintball involves weapons that project balls of paint at a fairly high speed. A secluded area designated for paintball would prevent people, including base housing occupants and children, and structures such as buildings or vehicles from getting hit.

Proposed Action: Under the proposed action, Grand Forks AFB would construct a miscellaneous services recreation area in the previous Dakota Military Family Housing (MFH) Area. Houses have been removed but roads and foundations still exist. No roads, trees, or concrete would need to be removed. A contractor would prepare the field including barricade construction and weed removal. Signs would be posted stating that entry or trespassing on this property has to be authorized through outdoor recreation or security forces. The field would be fitted with movable objects and walls that could easily be set up and taken down.

Alternate Location Alternative: Under the alternative action, Grand Forks AFB would construct the paint ball area between the bike motocross (BMX) track and Holly MFH. This is not a viable alternative due to the proximity to housing and other structures such as building, cars, and base housing occupants. Paint would potentially end up on buildings and vehicles causing tension between the facility and the base population. It is likely that children would be located in this area as it is between housing and the bike motocross track.

No Action Alternative: Under the no action alternative, Grand Forks AFB would not construct miscellaneous services recreation area on Grand Forks AFB. Personnel and dependents would have to travel to the nearest facility available for this activity which is Area 13 in Larimore or playing unofficially in “CE Park” where they run the risk of being mistaken for wild game and being shot by bow hunters.

Impacts by Resource Area

Air Quality - Air Quality is considered good and the area is in attainment for all criteria pollutants. Appropriate Material Safety Data Sheet (MSDS) indicates that paintballs contain non-hazardous material, are water soluble and biodegradable. No significant impacts to air quality would result because of paintball activities.

Noise - The people utilizing paintball guns would create additional noise. The increase in noise would be negligible and only occur when the area was being used.

Wastes, Hazardous Materials, and Stored Fuels - The increase in hazardous and solid wastes from construction related activities would be minimal and temporary. Construction debris would be disposed of in approved location, such as the Grand Forks Municipal Landfill.

Water Resources – Provided best management practices (BMPs) are followed, there would be minimal impacts on ground water, surface water, water quality, and wetlands. The proposed action would have no impact on wastewater.

Biological Resources – BMPs and control measures, including silt fences and covering of stockpiles, would be implemented to ensure that impacts to biological resources be kept to a minimum. BMPs would be required to prevent the spread of noxious weeds, minimize soil erosion, and promote the establishment of native plant species.

Socioeconomic Resources - This action would have a minor positive effect on the local economy. Secondary retail purchases would make an additional contribution to the local communities. The implementation of the proposed action, therefore, would provide a short-term, beneficial impact to local contractors and retailers during the construction phase of the project.

Cultural Resources - The proposed action has little potential to impact cultural resources. In the unlikely event any such artifacts were discovered during the construction activities, the contractor would be instructed to halt construction and immediately notify Grand Forks AFB civil engineers who would notify the State Historic Preservation Officer.

Land Use - Siting for the proposed action has been approved by the Facility Board.

Transportation Systems – The proposed construction would minor adverse impact to transportation systems on base due to vehicles traveling to and from the recreation site.

Airspace/Airfield Operations - The proposed action would not impact aircraft safety or airspace compatibility.

Safety and Occupational Health – The Grand Forks AFB Safety Office has indicated they have safety concerns regarding siting of the miscellaneous services recreation area although they have not indicated what those concerns are. The site would be cleaned up prior to utilization to minimize safety hazards.

Environmental Management – The proposed action would not impact IRP Sites. BMPs would be implemented to prevent erosion. No pesticides would be used as part of this project.

Environmental Justice - EO 12898 requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. There are no minority or low-income populations in the area of the proposed action or alternatives, and, thus, there would be no disproportionately high or adverse impact on such populations.

1.0 PURPOSE OF AND NEED FOR PROPOSED ACTION

This Environmental Assessment (EA) examines the potential for impacts to the environment resulting from the construction of miscellaneous services recreation area on Grand Forks Air Force Base (AFB). As required by the *National Environmental Policy Act* (NEPA) of 1969, federal agencies must consider environmental consequences in their decision making process. The EA provides analysis of the potential environmental impacts from both the proposed action and its alternatives.

1.1 INTRODUCTION

Located in northeastern North Dakota (ND), Grand Forks AFB is the first core refueling wing in Air Mobility Command (AMC) and home to 48 KC-135R Stratotanker aircraft. The host organization at Grand Forks AFB is the 319th Air Refueling Wing (ARW). Its mission is to guarantee global reach, by extending range in the air, supplying people and cargo where and when they are needed and provides air refueling and airlift capability support to United States Air Force (USAF) operations anywhere in the world, at any time. Organizational structure of the 319th ARW consists primarily of an operations group, maintenance group, mission support group, and medical group.

The location of the proposed action (and the alternative actions) would be at Grand Forks AFB, ND. Grand Forks AFB covers approximately 5,420 acres of government-owned land and is located in northeastern ND, about 14 miles west of Grand Forks, along United States (US) Highway 2. Grand Forks (population 49,321) is the third largest city in ND. Appendix A includes a Location Map. The city, and surrounding area, is a regional center for agriculture, education, and government. It is located approximately 160 miles south of Winnipeg, Manitoba, and 315 miles northwest of Minneapolis, Minnesota. The total base population, as of May 2003, is approximately 6,934. Of that, 2,849 are military, 3,747 are military dependents, and 338 civilians working on base (Grand Forks AFB, 2003).

The Dakota Military Family Housing (MFH) area is located outside Grand Forks AFB's main perimeter fence and to the east of the main gate of Grand Forks AFB. The proposed miscellaneous services recreation area would be collocated with the proposed mass/mobility parking lot and all-terrain vehicle training area.

1.2 NEED FOR THE ACTION

A miscellaneous services recreation area is strongly needed by base personnel and dependents that participate in the sport of the paintball. Currently, there is no designated location for this activity; thereby, causing safety concerns. Paintball involves weapons that project balls of paint at a fairly high speed. A secluded area designated for paintball would prevent people, including base housing occupants and children, and structures such as buildings or vehicles from getting hit. Problems have occurred with people unofficially using "CE Park", located in the northwest corner of the base near Turtle River, for paintball. Officially, bow hunting is allowed in this area during the deer bow hunting season creating a dangerous situation. Additionally, Security Forces

often utilize Outdoor Recreations' Recreation Vehicle (RV) storage lot and storage bay for training of military working dogs. This is dangerous because this area is a high traffic area and customers come enter and exit the RV storage lot and storage bay on a daily basis. A designated miscellaneous services recreation area could also be utilized for training of military working dogs.

1.3 OBJECTIVES FOR THE ACTION

The purpose of the proposed action is to construct a miscellaneous services recreation area that could officially be used for paintball.

1.4 SCOPE OF EA

This EA identifies, describes, and evaluates the potential environmental impacts associated with construction of miscellaneous services recreation area on Grand Forks AFB. This analysis covers only those items listed above. It does not include any previous construction of facilities, parking lots, associated water drainage structures, or other non-related construction activities.

The following must be considered under the NEPA, Section 102(E).

- Air Quality
- Noise
- Wastes, Hazardous Materials, and Stored Fuels
- Water Resources
- Biological Resources
- Socioeconomic Resources
- Cultural Resources
- Land Use
- Transportation Systems
- Airspace/Airfield Operations
- Safety and Occupation Health
- Environmental Management
- Environmental Justice

1.5 DECISION(S) THAT MUST BE MADE

This EA evaluates the environmental consequences from construction of miscellaneous services recreation area on Grand Forks AFB. NEPA requires that environmental impacts be considered prior to final decision on a proposed project. The Environmental Management Flight Chief will determine if a Finding of Significant Impact can be signed or if an Environmental Impact Statement (EIS) must be prepared. Preparation of an environmental analysis must be accomplished prior to a final decision regarding the proposed project and must be available to inform decision makers of potential environmental impacts of selecting the proposed action or either of the alternatives.

1.6 APPLICABLE REGULATORY REQUIREMENTS AND REQUIRED COORDINATION

These regulations require federal agencies to analyze potential environmental impacts of proposed actions and alternatives and to use these analyses in making decisions on a proposed action. All cumulative effects and irretrievable commitment of resources must also be assessed during this process. The Council on Environmental Quality (CEQ) regulations declares that an EA is required to accomplish the following objectives:

- Briefly provide sufficient evidence and analysis for determining whether to prepare an EIS or a Finding of No Significant Impact (FONSI).
- Aid in an agency's compliance with NEPA when an EIS is not necessary, and facilitate preparation of an EIS when necessary.

Air Force Instruction (AFI) 32-7061 as promulgated in 32 Code of Federal Regulations (CFR) 989, specifies the procedural requirements for the implementation of NEPA and the preparation of an EA. Other environmental regulatory requirements relevant to the Proposed Action and alternatives are also in this EA. Regulatory requirements including, but not restricted to the following programs will be assessed:

- AF Environmental Impact Analysis Process (EIAP) (32 CFR 989)
- AFI 32-7020, Environmental Restoration Program
- AFI 32-7040, Air Quality Compliance
- AFI 32-7041, Water Quality Compliance
- AFI 32-7042, Solid and Hazardous Waste Compliance
- AFI 32-7063, Air Installation Compatible Use Zone (AICUZ) Program
- AFI 32-7064, Integrated Natural Resource Management
- Archaeological Resources Protection Act (ARPA) [16 U.S.C. Sec 470a-11, *et seq.*, as amended]
- Clean Air Act (CAA) [42 U.S.C. Sec 7401, *et seq.*, as amended]
- Clean Water Act (CWA) [33 U.S.C. Sec 400, *et seq.*]
- CWA [33 U.S.C. Sec 1251, *et seq.*, as amended]
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) [42 U.S.C. Sec. 9601, *et seq.*]
- Defense Environmental Restoration Program [10 U.S.C. Sec. 2701, *et seq.*]
- Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 [42 U.S.C. Sec. 11001, *et seq.*]
- Endangered Species Act (ESA) [16 U.S.C. Sec 1531-1543, *et seq.*]
- Executive Order (EO) 11514, Protection and Enhancement of Environmental Quality as Amended by EO 11991
- EO 11988, Floodplain Management
- EO 11990, Protection of Wetlands
- EO 12372, Intergovernmental Review of Federal Programs

- EO 12898, Environmental Justice
- EO 12989 Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations
- EO 13045, Protection of Children from Environmental Health Risks and Safety Risks
- Hazardous Materials Transportation Act of 1975 [49 U.S.C. Sec 1761, *et seq.*]
- NEPA of 1969 [42 U.S.C. Sec 4321, *et seq.*]
- National Historic Preservation Act (NHPA) of 1966 [16 U.S.C. Sec 470, *et seq.*, as amended]
- The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 [Public Law 101-601, 25 U.S.C. Sec. 3001-3013, *et seq.*]
- Noise Control Act of 1972 [42 U.S.C. Sec. 4901, *et seq.*, Public Law 92-574]
- ND Air Pollution Control Act (Title 23) and Regulations
- ND Air Quality Standards (Title 33)
- ND Hazardous Air Pollutants Emission Standards (Title 33)
- Occupational Safety and Health Act (OSHA) of 1970 [29 U.S.C. Sec. 651, *et seq.*]
- Resource Conservation and Recovery Act (RCRA) of 1976 [42 U.S.C. Sec. 6901, *et seq.*]
- Toxic Substances Control Act (TSCA) of 1976 [15 U.S.C. Sec. 2601, *et seq.*]

Grand Forks AFB has a National Pollutant Discharge Elimination System (NPDES) permit to cover base-wide industrial activities. Construction of the proposed action or the alternative action would disturb more than one acre requiring a contractor to obtain a separate NPDES from the North Dakota Department of Health (NDDH). The permit would allow discharge of storm water runoff until the site is stabilized by the reestablishment of vegetation or other permanent cover.

Scoping for this EA included discussion of relevant issues with members of the environmental management and bioenvironmental flights. Scoping letters requesting comments on possible issues of concern were sent to agencies with pertinent resource responsibilities. In accordance with AFI 32-7061, a copy is submitted to the ND Division of Community Services.

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

Based on the descriptions of the relevant environmental resources presented in Section 3 and the predictions and analyses presented in Section 4, this section presents a comparative summary matrix of the alternatives (the heart of the analysis) providing the decision maker and the public with a clear basis for choice among the alternatives.

This section has five parts:

- Selection Criteria for Alternatives
- Alternatives Considered but Eliminated from Detailed Study
- Detailed Descriptions of the Three Alternatives Considered
- Comparison of Environmental Effects of the Proposed Action and Alternatives
- Identification of the Preferred Alternative

2.2 SELECTION CRITERIA FOR ALTERNATIVES

Selection criteria used to evaluate the Proposed and Alternative Actions include the following:

- *Criteria 1: Provide a miscellaneous services recreation area.*

2.3 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

No alternatives were eliminated from detailed study.

2.4 DESCRIPTION OF PROPOSED ALTERNATIVES

This section describes the activities that would occur under three alternatives: the proposed action and the two action alternatives. These three alternatives provide the decision maker with a reasonable range of alternatives from which to choose.

2.4.1 Alternative 1 (Proposed Action): Construct Miscellaneous Services Recreation Area

Under this alternative, Grand Forks AFB would construct a miscellaneous services recreation area in the previous Dakota MFH Area. Houses have been removed from the area but roads and foundations still exist. No roads, trees, or concrete would need to be removed. A contractor would be responsible for the preparation of the field including barricade construction and weed removal. The area would be fitted with signs stating that entry or trespassing on this property has to be authorized through outdoor recreation or security forces. The field would be fitted with movable objects and walls that could be set up and taken down easily. A fence may be included as part of the project. Funding limitation may require the fence be constructed after operation of the facility has generated the required funds. A building would be constructed by security forces for their military working dog training. This location would keep the military working dogs away from MFH and the general base population preventing anyone from getting in the way

of the dogs. Security Forces would also practice combat movements in the area. No paintball would occur at these times.

2.4.2 Alternative 2: Alternate Location

The alternative action would construct the paint ball area between the Bike Motocross (BMX) track and Holly MFH. This is not a viable alternative due to the proximity to housing and other structures such as building, cars, and base housing occupants. Paint would potentially end up on buildings and vehicles causing tension between the facility and the base population. It is likely that children would be located in this area as it is between housing and the BMX track. There would be a safety concern for people in the area due to the military dog training. People wandering through the area would run the risk of getting bitten by one of the dogs if they got in the way.

2.4.3 Alternative 3 (No Action Alternative): Status Quo

Alternative 3, no action alternative, would not construct miscellaneous services recreation area on Grand Forks AFB. Personnel and dependents would have to travel to the nearest facility available for this activity which is Area13 in Larimore or playing unofficially in CE Park where they run the risk of being mistaken for wild game and being shot by bow hunters.

2.5 DESCRIPTION OF PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS RELEVANT TO CUMULATIVE IMPACTS

Impacts from the Proposed Action would be concurrent with other actions occurring at Grand Forks AFB. There are several other construction and demolition projects occurring on Grand Forks AFB in the same time frame. These projects are addressed under separate NEPA documents.

2.6 SUMMARY COMPARISON OF THE EFFECTS OF ALL ALTERNATIVES

Potential impacts from implementing the Proposed Action, Alternative 2, and the No Action Alternative are discussed in detail in Chapter 4.

Table 2.6.1: Summary of Environmental Impacts			
	Proposed Action	Alternative 1	No Action Alternative
Legend: ST = short-term; LT = long-term			
Air Quality	None	None	None
Noise	Minor Adverse LT Impact	Minor Adverse LT Impact	None
Wastes, Hazardous Materials, and Stored Fuels	Minor Adverse ST Impact	Minor Adverse ST Impact	None
Water Resources			
Ground Water	Minor Adverse ST Impact	Minor Adverse ST Impact	None
Surface Water	Minor Adverse ST Impact	Minor Adverse ST Impact	None
Wastewater	None	None	None
Water Quality	Minor Adverse ST Impact	Minor Adverse ST Impact	None

Table 2.6.1: Summary of Environmental Impacts			
	Proposed Action	Alternative 1	No Action Alternative
Wetlands	None	Minor Adverse LT Impact	None
Biological Resources			
Vegetation	Minor Adverse ST Impact	Minor Adverse ST Impact	None
Noxious Weeds	Minor Adverse LT Impact	Minor Adverse LT Impact	None
Wildlife	Minor Adverse ST Impact	Minor Adverse ST Impact	None
Threatened and Endangered Species	None	None	None
Socioeconomic Resources	Minor Beneficial ST Impact	Minor Beneficial ST Impact	None
Cultural Resources	None	None	None
Land Use	None	Minor Adverse LT Impact	None
Transportation Systems	Minor Adverse ST Impact	Minor Adverse ST Impact	None
Airspace/Airfield Operations			
Aircraft Safety	None	None	None
Airspace Compatibility	None	None	None
Safety and Occupational Health	Minor Adverse LT Impact	Minor Adverse LT Impact	None
Environmental Management			
Installation Restoration Program	None	None	None
Geological Resources	Minor Adverse ST Impact	Minor Adverse ST Impact	None
Pesticide Management	None	None	None
Environmental Justice	None	None	None

2.7 IDENTIFICATION OF PREFERRED ALTERNATIVE

The preferred action is Alternative 1 (Proposed Action): *Construct Miscellaneous Services Recreation Area.*

3.0 AFFECTED ENVIRONMENT

3.1 INTRODUCTION

This section succinctly describes the operational concerns and the environmental resources relevant to the decision that must be made concerning this proposed action. Environmental concerns and issues relevant to the decision to be made and the attributes of the potentially affected environment are studied in greater detail in this section.

This descriptive section, combined with the definitions of the three alternatives in Section 2, and their predicted effects in Section 4, establish the scientific baseline against which the decision-maker and the public can compare and evaluate the activities and effects of all three alternatives.

3.2 AIR QUALITY

Grand Forks AFB has a humid continental climate that is characterized by frequent and drastic weather changes. The summers are short and humid with frequent thunderstorms. Winters are long and severe with almost continuous snow cover. The spring and fall seasons are generally short transition periods. The average annual temperature is 40° Fahrenheit (F) and the monthly mean temperature varies from 6° F in January to 70° F in July. Mean annual precipitation is 19.5 inches. Rainfall is generally well distributed throughout the year, with summer being the wettest season and winter the driest. An average of 34 thunderstorm days per year is recorded, with some of these storms being severe and accompanied by hail and tornadoes. Mean annual snowfall recorded is 40 inches with the mean monthly snowfall ranging from 1.6 inches in October to 8.0 inches in March. Relative humidity averages 58 percent annually, with highest humidities being recorded in the early morning. The average humidity at dawn is 76 percent. Mean cloud cover is 48 percent in the summer and 56 percent in the winter (USAF, 2003).

Table 3.2-1: Climate Data for Grand Forks AFB, ND						
Month	Mean Temperature (°F)			Precipitation (Inches)		
	Daily			Monthly		
	Maximum	Minimum	Monthly	Mean	Maximum	Minimum
January	15	-1	6	0.7	2.4	0.1
February	21	5	13	0.5	3.2	0.0
March	34	18	26	1.0	2.9	0.0
April	53	32	41	1.5	4.0	0.0
May	69	47	56	2.5	7.8	0.5
June	77	56	66	3.0	8.1	0.8
July	81	61	70	2.7	8.1	0.5
August	80	59	67	2.6	5.5	0.1
September	70	49	57	2.3	6.2	0.3
October	56	37	44	1.4	5.7	0.1
November	34	20	26	0.7	3.3	0.0
December	20	6	12	0.6	1.4	0.0

Source: AFCCC/DOO, October 1998

Wind speed averages 10 miles per hour (mph). A maximum wind speed of 74 mph has been recorded. Wind direction is generally from the northwest during the late fall, winter, and spring, and from the southeast during the summer.

Grand Forks County is included in the ND Air Quality Control Region. This region is in attainment status for all criteria pollutants. In 1997, the ND Department of Health (NDDH) conducted an Air Quality Monitoring Survey that indicated that the quality of ambient air in ND is generally good as it is located in an attainment area (NDDH, 1998). Grand Forks AFB has the following air permits: T5-F78004 (permit to operate) issued by NDDH and a CAA Title V air emissions permit.

The United States Environmental Protection Agency (USEPA) established the National Ambient Air Quality Standards (NAAQS), which define the maximum allowable concentrations of pollutants that may be reached, but not exceeded within a given time period. The NAAQS regulates the following criteria pollutants: Ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead (Pb), and particulate matter. The ND Ambient Air Quality Standards (NDAAQS) were set by the State of ND. These standards are more stringent and emissions for operations in ND must comply with the Federal or State standard that is the most restrictive. There is also a standard for hydrogen sulfide (H₂S) in ND.

Prevention of significant deterioration (PSD) regulations establish SO₂, particulate matter 10 microns in diameter (PM₁₀), and NO₂ that can be emitted above a premeasured amount in each of three class areas. Grand Forks AFB is located in a PSD Class II area where moderate, well-controlled industrial growth could be permitted. Class I areas are pristine areas and include national parks and wilderness areas. Significant increases in emissions from stationary sources (100 tons per year (tpy) of CO, 40 tpy of nitrogen oxides (NO_x), volatile organic compounds (VOCs), or sulfur oxides (SO_x), or 15 tpy of PM₁₀) and the addition of major sources requires compliance with PSD regulations. There is also a 25 ton/year level for total particulate.

Air pollutants include O₃, CO, NO₂, SO₂, Pb, and particulate matter. Ground disturbing activities create PM₁₀ and particulate matter 2.5 microns in diameter (PM_{2.5}). Combustion creates CO, SO₂, PM₁₀, and PM_{2.5} particulate matter and the precursors (VOC and NO₂) to O₃. Only a small amount of Hazardous Air Pollutants (HAP) are generated from internal combustion processes or earth-moving activities. The Grand Forks AFB Final Emissions Survey Report (USAF, 1996) reported that Grand Forks AFB only generated small levels HAPs, 10.3 tpy of combined HAPs and 2.2 tpy maximum of a single HAP (methyl ethyl ketone). Methyl Ethyl Ketone is associated with aircraft and vehicle maintenance and repair. Secondary sources include fuel storage and dispensing (USAF, 2001a).

Table 3.2-2 National Ambient Air Quality Standards (NAAQS) and ND Ambient Air Quality Standards (NDAAQS)				
Pollutant	Averaging Time	NAAQS $\mu\text{g}/\text{m}^3$ (ppm) ^a		NDAAQS $\mu\text{g}/\text{m}^3$ (ppm) ^a
		Primary ^b	Secondary ^c	
O ₃	1 hr	235 (0.12)	Same	Same
	8 hr ^e	157 (0.08)	Same	None
CO	1 hr	40,000 (35)	None	40,000 (35)
	8 hr	10,000 (9)	None	10,000 (9)
NO ₂	AAM ^d	100 (0.053)	Same	Same
SO ₂	1 hr	None	None	715 (0.273)
	3 hr	None	1,300 (0.5)	None
	24 hr	365 (0.14)	None	260 (0.099)
	AAM	80 (0.03)	None	60 (0.023)
PM ₁₀	AAM	50	Same	Same
	24 hr	150	Same	Same
PM _{2.5} ^e	AAM	65	Same	None
	24 hr	15	Same	None
Pb	¼ year	1.5	Same	Same
H ₂ S	1 hr	None	None	280 (0.20)
	24 hr	None	None	140 (0.10)
	3 mth	None	None	28 (0.02)
	AAM	None	None	14 (10)
	Instantaneous			14 (10)

^a $\mu\text{g}/\text{m}^3$ – micrograms per cubic meter; ppm – parts per million
^bNational Primary Standards establish the level of air quality necessary to protect the public health from any known or anticipated adverse effects of pollutant, allowing a margin of safety to protect sensitive members of the population.
^cNational Secondary Standards establish the level of air quality necessary to protect the public welfare by preventing injury to agricultural crops and livestock, deterioration of materials and property, and adverse impacts on the environment.
^dAAM – Annual Arithmetic Mean.
^eThe Ozone 8-hour standard and the PM 2.5 standards are included for information only. A 1999 federal court ruling blocked implementation of these standards, which USEPA proposed in 1997. USEPA has asked the US Supreme Court to reconsider that decision (USEPA, 2000).
PM₁₀ is particulate matter equal to or less than 10 microns in diameter.
PM_{2.5} is particulate matter equal to or less than 2.5 microns in diameter.
Source: 40 CFR 50, ND Air Pollution Control Regulations – North Dakota Administrative Code (NDAC) 33-15

3.3 NOISE

Noise generated on Grand Forks AFB consists mostly of aircraft, vehicular traffic and construction activity. Most noise is generated from aircraft during takeoff and landing and not from ground traffic. Noise levels are dependent upon type of aircraft, type of operations, and distance from the observer to the aircraft. Duration of the noise is dependent upon proximity of the aircraft, speed, and orientation with respect to the observer.

Table 3.3-1 Typical Decibel Levels Encountered in the Environment and Industry			
Sound Level (dBA) ^a	Maximum Exposure Limits	Source of Noise	Subjective Impression
10			Threshold of hearing
20		Still recording studio; Rustling leaves	
30		Quiet bedroom	
35		Soft whisper at 5 ft ^b ; Typical library	
40		Quiet urban setting (nighttime); Normal level in home	Threshold of quiet
45		Large transformer at 200 ft	
50		Private business office; Light traffic at 100 ft; Quiet urban setting (daytime)	
55		Window air conditioner; Men's clothing department in store	Desirable limit for outdoor residential area use (EPA)
60		Conversation speech; Data processing center	
65		Busy restaurant; Automobile at 100 ft	Acceptable level for residential land use
70		Vacuum cleaner in home; Freight train at 100 ft	Threshold of moderately loud
75		Freeway at 10 ft	
80		Ring alarm clock at 2 ft; Kitchen garbage disposal; Loud orchestral music in large room	Most residents annoyed
85		Printing press; Boiler room; Heavy truck at 50 ft	Threshold of hearing damage for prolonged exposure
90	8 hr ^c	Heavy city traffic	
95	4 hr	Freight train at 50 ft; Home lawn mower	
100	2 hr	Pile driver at 50 ft; Heavy diesel equipment at 25 ft	Threshold of very loud
105	1 hr	Banging on steel plate; Air Hammer	
110	0.5 hr	Rock music concert; Turbine condenser	
115	0.25 hr	Jet plane overhead at 500 ft	
120	< 0.25 hr	Jet plane taking off at 200 ft	Threshold of pain
135	< 0.25 hr	Civil defense siren at 100 ft	Threshold of extremely loud
^a dBA – decibals ^b ft – feet ^c hr - hours Source: US Army, 1978			

Table 3.3-2 Approximate Sound Levels (dBA) of Construction Equipment						
Equipment Type	Sound Levels (dBA) at Various Distances (ft)					
	50	100	200	400	800	1,600
Front-end Loader	84	78	72	66	60	54
Dump Truck	83	77	71	65	59	53
Truck	83	77	71	65	59	53
Tractor	84	78	72	66	58	52
Source: Thurman, 1976; US Army, 1978						

Because military installations attract development in proximity to their airfields, the potential exists for urban encroachment and incompatible development. The USAF utilizes a program known as AICUZ to help alleviate noise and accident potential problems due to unsuitable community development. AICUZ recommendations give surrounding communities alternatives to help prevent urban encroachment. Noise contours are developed from the Day-Night Average A-Weighted Sound Level (DNL) data which defines the noise created by flight operations and ground-based activities. The AICUZ also defines Accident Potential Zones (APZs), which are rectangular corridors extending from the ends of the runways. Recommended land use activities and densities in the APZs for residential, commercial, and industrial uses are provided in the base's AICUZ study. Grand Forks AFB takes measures to minimize noise levels by evaluating aircraft operations. Blast deflectors are utilized in designated areas to deflect blast and minimize exposure to noise.

3.4 WASTES, HAZARDOUS MATERIALS, AND STORED FUELS

Hazardous wastes, as listed under the RCRA, are defined as any solid, liquid, contained gaseous, or combination of wastes that pose a substantive or potential hazard to human health or the environment. On-base hazardous waste generation involves three types of on-base sites: an accumulation point (90-day), satellite accumulation points, and spill cleanup equipment and materials storage (USAF, 2001c). Discharge and emergency response equipment is maintained in accessible areas throughout Grand Forks AFB. The Fire Department maintains adequate fire response and discharge control and containment equipment. Equipment stores are maintained in buildings 523 and 530. Petroleum contaminated soils generated from excavations throughout the base can be treated at the land treatment facility located on base. These solid wastes are tilled or turned several times a year to remediate the soils to acceptable levels.

Hardfill, construction debris, and inert waste generated by Grand Forks AFB are disposed of at a permitted off-base landfill. All on-base household garbage and solid waste is collected by a contractor and transported to the Grand Forks County Landfill, which opened in 1982.

Recyclable materials from industrial facilities are collected in the recycling facility, off the southeast corner of building 408. Paper, glass, plastics, cardboard, and wood are collected in separate storage bins. Curbside containers are used in housing for recyclable materials. A contractor collects these materials and transports them off base.

The Environmental Management Flight manages the hazardous material through a contract with Pacific Environmental Services. Typical hazardous materials include reactive materials such as explosives, ignitables, toxics, and corrosives. Improper storage can impact human health and the safety of the environment.

Since Grand Forks AFB is a military installation with a flying mission, there are several aboveground and underground fuel storage tanks. None of the alternatives would impact fuel storage tanks.

3.5 WATER RESOURCES

3.5.1 Ground Water

Chemical quality of ground water is dependent upon the amount and type of dissolved gases, minerals, and organic material leached by water from surrounding rocks as it flows from recharge to discharge areas. The water table depth varies throughout the base, from a typical 1-3 ft to 10 ft or more below the surface.

Even though the Dakota Aquifer has produced more water than any other aquifer in Grand Forks County, the water is very saline and generally unsatisfactory for domestic and most industrial uses. Its primary use is for livestock watering. It is a sodium chloride type water with total dissolved solids concentrations of about 4,400 ppm. The water generally contains excessive chloride, iron, sulfate, total dissolved solids, and fluoride. The water from the Dakota is highly toxic to most domestic plants and small grain crops, and in places, the water is too highly mineralized for use as livestock water (Hansen and Kume, 1970).

Water from wells tapping the Emerado Aquifer near Grand Forks AFB is generally of poor quality due to upward leakage of poor quality water from underlying bedrock aquifers. It is sodium sulfate type water with excessive hardness, chloride, sulfate, and total dissolved solids. Water from the Lake Agassiz beach aquifers is usually of good chemical quality in Grand Forks County. The water is a calcium bicarbonate type that is relatively soft. The total dissolved content ranges from 308 to 1,490 ppm. Most water from beach aquifers is satisfactory for industrial, livestock, and agricultural uses (Hansen and Kume, 1970).

Grand Forks AFB draws 85 to 90 percent of its water for industrial, commercial and housing functions from the City of Grand Forks and 10 to 15 percent from Agassiz Water.

3.5.2 Surface Water

Natural surface water features located on or near Grand Forks AFB are the Turtle River and Kellys Slough National Wildlife Refuge (NWR). Drainage from surface water channels ultimately flows into the Red River.

The Turtle River, crossing the base boundary at the northwest corner, is very sinuous and generally flows in a northeasterly direction. It receives surface water runoff from the western portion of Grand Forks AFB and eventually empties into the Red River of the North that flows north to Lake Winnipeg, Canada. The Red River drainage basin is part of the Hudson Bay drainage system. At Manvel, ND, approximately 10 miles northeast of Grand Forks AFB, the mean discharge of the Turtle River is 50.3 feet cubed per second (ft³/s). Peak flows result from spring runoff in April and minimum flows (or no flow in some years) occur in January and February.

NDDH has designated the Turtle River to be a Class II stream, it may be intermittent, but, when flowing, the quality of the water, after treatment, meets the chemical, physical, and

bacteriological requirements of the NDDH for municipal use. The designation also states that it is of sufficient quality to permit use for irrigation, for propagation of life for resident fish species, and for boating, swimming, and other water recreation.

Kelly's Slough NWR occupies a wide, marshy flood plain with a poorly defined stream channel, approximately two miles east and downstream of Grand Forks AFB. Kellys Slough NWR receives surface water runoff from the east half of the base and effluent from the base sewage lagoons located east of the base. Surface water flow of the slough is northeasterly into the Turtle River Drainage from surface water channels ultimately flowing into the Red River. Floodplains are limited to an area 250 ft on either side of Turtle River (about 46 acres on base). Appendix C contains a map depicting floodplains. Any development in or modifications to floodplains must be coordinated with the Corps of Engineers and the Federal Emergency Management Agency (FEMA).

Surface water runoff leaves Grand Forks AFB at four primary locations related to identifiable drainage areas on base. The four sites are identified as northeast, northwest, west, and southeast related to the base proper. These outfalls were approved by the NDDH as stated in the Grand Forks AFB ND Pollutant Discharge Elimination System (NDPDES) Permit NDR02-0314 Stormwater Discharges from Industrial Activity. Of the four outfall locations, the west and northwest sites flow into the Turtle River, the northeast site flows to the north ditch and the southeast outfall flows into the south ditch. The latter two flow to Kellys Slough and then the Turtle River. All drainage from these surface water channels ultimately flows into the Red River. The Bioenvironmental Engineering Office samples the four outfall locations during months when de-icing activities occur on base.

3.5.3 Waste Water

Grand Forks AFB discharges its domestic and industrial wastewater to four stabilization lagoons located east of the main base. The four separate treatment cells consist of one primary treatment cell, two secondary treatment cells, and one tertiary treatment cell. Wastewater effluent is discharged under ND Permit ND0020621 into Kellys Slough. Wastewater discharge occurs for about one week, sometime between mid-April through October. Industrial wastewater at the base comprises less than ten percent of the total flow to the treatment lagoons.

3.5.4 Water Quality

According to the National Water Quality Inventory Report (USEPA, 1995), ND reports the majority of rivers and streams have good water quality. Natural conditions, such as low flows, can contribute to violations of water quality standards. During low flow periods, the rivers are generally too saline for domestic use. Grand Forks AFB receives water from Grand Forks and Lake Agassiz Water. The city recovers its water from the Red River and the Red Lake River, while the water association provides water from aquifers. The water association recovers water from well systems within glacial drift aquifers (USAF, 1999). The 319th Civil Engineering Squadron tests the water received on base daily for fluorine and chlorine. The 319th

Bioenvironmental Flight collects monthly bacteriological samples to be analyzed at the ND State Laboratory.

3.5.5 Wetlands

About 246,900 acres in the county are drained wetland Type I (wet meadow) to Type V (open freshwater). Approximately 59,500 acres of wetland Type I to V are used for wetland habitat. Wetland Types IV and V include areas of inland saline marshes and open saline water. Kellys Slough NWR occupies a wide, marshy flood plain with a poorly defined stream channel, approximately two miles east and downstream of Grand Forks AFB. Kellys Slough NWR is the most important regional wetland area in the Grand Forks vicinity. EO 11990 requires zero loss of wetlands. Grand Forks AFB has 49 wetlands, covering 23.9 acres of wetlands (see Appendix C), including 33 jurisdictional wetlands covering 12.2 acres. Wetlands on Grand Forks AFB occur frequently in drainage ways, low-lying depressions, and potholes. Wetlands are highly concentrated in drainage ways leading from the wastewater treatment lagoons to Kellys Slough NWR. The majority of wetland areas occur in the northern and central portions of base, near the runway, while the remaining areas are near the eastern boundary and southeastern corner of base. Development in or near these areas must include coordination with the ND State Water Commission and the USACE.

3.6 BIOLOGICAL RESOURCES

3.6.1 Vegetation

Plants include a large variety of naturally occurring native plants. Because of the agrarian nature of Grand Forks County, cropland is the predominant element for wildlife habitat. Pastures, meadows, and other non-cultivated areas are overgrown with grasses, legumes, and wild herbaceous plants. Included in the grasses and legumes vegetation species are tall wheat grass, brome grass, sweet clover, and alfalfa. Herbaceous plants include little bluestem, goldenrod, green needle grass, western wheat grass, and bluegrama. Shrubs such as junberry, dogwood, hawthorn, and snowberry also are found in the area. In wetland areas, predominant species include smartweed, wild millet, cord grass, bulrushes, sedges, and reeds. These habitats for upland wildlife and wetland wildlife attract a variety of species to the area and support many aquatic species.

Various researchers, most associated with the University of ND, have studied current native floras in the vicinity of the base. Prior to 1993 field investigations, ten natural communities occurring in Grand Forks County were identified in the ND Natural Heritage Inventory (1994). Of these, only one community, Lowland Woodland, is represented within the base boundaries. Dominant trees in this community are elm, cottonwood, and green ash. Dutch elm disease has killed many of the elms. European buckthorn (a highly invasive exotic species), chokecherry, and wood rose (*Rosa woodsii*) are common in the understory in this area. Wood nettle (*Laportea canadensis*), stinging nettle (*Urtica dioica*), beggars' ticks (*Bidens frondosa*), and waterleaf (*Hydrophyllum virginianum*) are typical forbes.

One hundred and forty two total taxa, representing less than a third of the known Grand Forks County plant taxa, were identified in the ND Natural Heritage Inventory. No rare plants species are known to exist on Grand Forks AFB.

3.6.2 Wildlife

Grand Forks County is primarily cropland although there are wildlife areas located within the county. Kellys Slough NWR is located a couple miles northeast of Grand Forks AFB. In addition to being a wetland, it is a stopover point for migratory birds. The Prairie Chicken Wildlife Management Area is located north of Mekinock and contains 1,160 acres of habitat for deer, sharp-tailed grouse, and game birds. Wildlife can also be found at the Turtle River State Park, The Bremer Nature Trail, and the Myra Arboretum.

There is minimal habitat for wildlife on Grand Forks AFB due to extensive development. White tail deer, eastern cottontail, and ring-neck pheasant can be found on base. The proposed project area only provides low-quality foraging habitat for small animals.

3.6.3 Threatened and Endangered Species

According to the 1994 ND Natural Heritage Inventory, “There are no known federally threatened or endangered species populations on or adjacent to Grand Forks AFB.” The base does have infrequent use by migratory threatened and endangered species, such as the bald eagle and peregrine falcon, but there are no critical or significant habitats for those species present. The inventory also indicated that red-breasted nuthatch and moose are two special concern species. They have been observed on base near Turtle River. The inventory also indicated that there is no habitat on or near Grand Forks AFB to sustain a moose population. Red-breasted nuthatches prefer woodland habitats dominated by conifers. These birds are transients and pose no particular concern. The ESA does require that Federal Agencies not jeopardize the existence of a threatened or endangered species nor destroy or adversely modify designated critical habitat for threatened or endangered species.

3.7 SOCIOECONOMIC RESOURCES

Grand Forks County is primarily an agricultural region and, as part of the Red River Valley, is one of the world’s most fertile. Cash crops include sugar beets, beans, corn, barley, and oats. The valley ranks first in the nation in the production of potatoes, spring wheat, sunflowers, and durum wheat. Grand Forks County’s population in 2000 was 66,109, a decrease of 6.5 percent from the 1990 population of 70,638 (ND State Data Center, No Date). Grand Forks County’s annual mean wage in Oct 2001 was \$26,715 (Job Service of ND, 2001). Grand Forks AFB is one of the largest employers in Grand Forks County. As of May 2003, Grand Forks AFB had 3,165 active duty military members and 338 civilian employees. The total annual economic impact for Grand Forks AFB is \$325,647,980.

3.8 CULTURAL RESOURCES

According to the Grand Forks AFB Cultural Resources Management Plan, there are no archeological sites that are potentially eligible for the National Register of Historic Places (NRHP). A total of six archeological sites and six archeological find spots have been identified on the base. None meet the criteria of eligibility of the NRHP established in 36 CFR 60.4. There is no evidence for Native American burial grounds, or other culturally sensitive areas. Paleosols (soil that developed on a past landscape) remain a management concern requiring Section 106 compliance. Reconnaissance-level archival and archeological surveys of Grand Forks AFB conducted by the University of ND in 1989 indicated that there are no facilities (50 years or older) that possess historical significance. The base is currently consulting with the ND Historical Society on the future use of eight Cold War Era facilities. These are buildings 313, 606, 703-707, and 714.

3.9 LAND USE

Land use in Grand Forks County consists primarily of cultivated crops with remaining land used for pasture and hay, urban development, recreation, and wildlife habitat. Principal crops are spring wheat, barley, sunflowers, potatoes, and sugar beets. Turtle River State Park, developed as a recreation area in Grand Forks County, is located about five miles west of the base. Several watershed protection dams are being developed for recreation activities including picnicking, swimming, and ball fields. Wildlife habitat is very limited in the county. Kellys Slough NWR (located about two miles east of the base) and the adjacent National Waterfowl Production Area are managed for wetland wildlife and migratory waterfowl, but they also include a significant acreage of open land wildlife habitat.

The main base encompasses 5,420 acres, of which the USAF owns 4,830 acres and another 590 acres are lands containing easements, permits, and licenses. Improved grounds, consisting of all covered area (under buildings and sidewalks), land surrounding base buildings, the 9-hole golf course, recreational ballfields, and the family housing area, encompass 1,120 acres. Semi-improved grounds, including the airfield, fence lines and ditch banks, skeet range, and riding stables account for 1,390 acres. The remaining 2,910 acres of the installation consist of unimproved grounds. These areas are comprised of woodlands, open space, and wetlands, including four lagoons (180.4 acres) used for the treatment of base wastewater. Agricultural outleased land (1,040 acres) is also classified as unimproved. Land use at the base is solely urban in nature, with residential development to the south and cropland, hayfields, and pastures to the north, west, and east.

3.10 TRANSPORTATION SYSTEMS

Seven thousand vehicles per day travel ND County Road B3 from Grand Forks AFB's east gate to the US Highway 2 Interchange (Clayton, 2001). Two thousand vehicles per day use the off-ramp from US Highway 2 onto ND County Road B3 (Dunn, 2001). US Highway 2, east of the base interchange, handles 10,800 vehicles per day. (Kingsley and Kuntz, 2001). A four lane arterial road has a capacity of 6,000 vehicles per hour and a two lane, 3,000, based on the average

capacity of 1,500 per hour per lane. Roadways adjacent to Grand Forks AFB are quite capable of accommodating existing traffic flows (USAF, 2001a).

Grand Forks AFB has good traffic flow even during peak hours (6-8 am and 4-6 pm). There are two gates: the main gate located off of County Road B3, about one mile north of U.S. Highway 2, and the Secondary Gate located off of U.S. Highway 2, about 3/4 mile west of County Road B3. The main gate is connected to Steen Boulevard (Blvd), which is the main east-west road, and the south gate is connected to Eielson Street (St), which is the main north-south road.

3.11 AIRSPACE/AIRFIELD OPERATIONS

3.11.1 AIRCRAFT SAFETY

Bird Aircraft Strike Hazard (BASH) is a major safety concern for military aircraft. Collision with birds may result in aircraft damage and aircrew injury, which may result in high repair costs or loss of the aircraft. A BASH hazard exists at Grand Forks AFB and its vicinity, due to resident and migratory birds. Daily and seasonal bird movements create various hazardous conditions. Although BASH problems are minimal, Kellys Slough NWR is a major stopover for migratory birds. Canadian Geese and other large waterfowl have been seen in the area (USAF, 2001b).

3.11.2 AIRSPACE COMPATIBILITY

The primary objective of airspace management is to ensure the best possible use of available airspace to meet user needs and to segregate requirements that are incompatible with existing airspace or land uses. The Federal Aviation Administration has overall responsibility for managing the nation's airspace and constantly reviews civil and military airspace needs to ensure all interests are compatibly served to the greatest extent possible. Airspace is regulated and managed through use of flight rules, designated aeronautical maps, and air traffic control procedures and separation criteria.

3.12 SAFETY AND OCCUPATIONAL HEALTH

Safety and occupational health issues include one-time and long-term exposure. Examples include asbestos/radiation/chemical exposure, explosives safety quantity-distance, and bird/wildlife aircraft hazard. Safety issues include injuries or deaths resulting from a one-time accident. Aircraft Safety includes information on birds/wildlife aircraft hazards and the BASH program. Health issues include long-term exposure to chemicals such as asbestos and lead-based paint. Safety and occupational health concerns could impact personnel working on the project and in the surrounding area.

The National Emission Standards for Hazardous Air Pollutants (NESHAP) of the CAA designates asbestos as HAP. OSHA provides worker protection for employees who work around or asbestos containing material (ACM). Regulated ACM (RACM) includes thermal system

insulation (TSI), any surfacing material, and any friable asbestos material. Non-regulated Category I non-friable ACM includes floor tile and joint compound.

Lead exposure can result from paint chips or dust or inhalation of lead vapors from torch-cutting operations. This exposure can affect the human nervous system. Due to the size of children, exposure to lead based paint is especially dangerous to small children. OSHA considers all painted surfaces in which lead is detectable to have a potential for occupational health exposure.

3.13 ENVIRONMENTAL MANAGEMENT

3.13.1 INSTALLATION RESTORATION PROGRAM

The Installation Restoration Program (IRP) is the AF's environmental restoration program based on the CERCLA. CERCLA provides for Federal agencies with the authority to inventory, investigate, and clean up uncontrolled or abandoned hazardous waste sites. There are seven IRP sites at Grand Forks AFB. These sites are identified as potentially impacted by past hazardous material or hazardous waste activities. They are the Fire Training Area/Old Sanitary Landfill Area, FT-02; New Sanitary Landfill Area, LF-03; Strategic Air Ground Equipment (SAGE) Building 306, ST-04; Explosive Ordnance Detonation Area, OT-05; Refueling Ramps and Pads, Base Tanks Area, ST-06; POL Off-Loading Area, ST-07; and Refueling Ramps and Pads, ST-08 (USAF, 1997b). Two sites are considered closed, OT-05 and ST-06. ST-08 has had a remedial investigation/feasibility study (RI/FS) completed and the rest are in long-term monitoring. Grand Forks AFB is not on the National Priorities List (NPL)

3.13.2 GEOLOGICAL RESOURCES

3.13.2.1 Physiography and Topography

The topography of Grand Forks County ranges from broad, flat plains to gently rolling hills that were produced mainly by glacial activity. Local relief rarely exceeds 100 ft in one mile, and, in parts of the lake basin, less than five ft in one mile.

Grand Forks AFB is located within the Central Lowlands physiographic province. The topography of Grand Forks County, and the entire Red River Valley, is largely a result of the former existence of Glacial Lake Agassiz, which existed in this area during the melting of the last glacier, about 12,000 years ago (Stoner et al., 1993). The eastern four-fifths of Grand Forks County, including the base, lies in the Agassiz Lake Plain District, which extends westward to the Pembina escarpment in the western portion of the county. The escarpment separates the Agassiz Lake Plain District from the Drift Plain District to the west. Glacial Lake Agassiz occupied the valley in a series of recessive lake stages, most of which were sufficient duration to produce shoreline features inland from the edge of the lake. Prominent physiographic features of the Agassiz Lake Plain District are remnant lake plains, beaches, inter-beach areas, and delta plains. Strandline deposits, associated with fluctuating lake levels, are also present and are indicated by narrow ridges of sand and gravel that typically trend northwest-southwest in Grand Forks County.

Grand Forks AFB lies on a large lake plain in the eastern portion of Grand Forks County. The lake plain is characterized by somewhat poorly drained flats and swells, separated by poorly drained shallow swells and sloughs (Doolittle et al., 1981). The plain is generally level, with local relief being less than one foot. Land at the base is relatively flat, with elevations ranging from 880 to 920 ft mean sea level (MSL) and averaging about 890 ft MSL. The land slopes to the north at less than 12 ft per mile.

3.13.2.2 Soil Type Condition

Soils consist of the Gilby loam series that are characterized by deep, somewhat poorly drained, moderately to slowly permeable soils in areas between beach ridges. The loam can be found from 0 to 12 inches. From 12 to 26 inches, the soil is a mixture of loam, silt loam, and very fine sandy loam. From 26 to 60 inches, the soil is loam and clay loam.

3.13.3 PESTICIDE MANAGEMENT

Pesticides are handled at various facilities including Environmental Controls, Golf Course Maintenance, and Grounds Maintenance. Other organizations assist in the management of pesticides and monitoring or personnel working with pesticides. Primary uses are for weed and mosquito control. Herbicides, such as Round-up, are used to maintain areas adjacent to roadways. Military Public Health and Bioenvironmental Engineering provide information on the safe handling, storage, and use of pesticides. Military Public Health maintains records on all pesticide applicators. The Fire Department provides emergency response in the event of a spill, fire, or similar type incident.

3.14 ENVIRONMENTAL JUSTICE

Environmental justice addresses the minority and low-income characteristics of the area, in this case Grand Forks County. The county is more than 93 percent Caucasian, 2.3 percent Native American, 1.4 percent African-American, 1 percent Asian/Pacific Islander, less than 1 percent Other, and 1.6 percent "Two or more races". In comparison, the US is 97.6 percent Caucasian, 12.3 African-American, 0.9 percent Native American or Native Alaskan, 3.6 percent Asian, 0.1 Native Hawaiian or Pacific Islander, 5.5 percent Other, and 2.4 percent "Two or more races". Approximately 12.5 percent of the county's population is below the poverty level in comparison to 13.3 percent the state (US Bureau of the Census, 2002). There are few residences and no concentrations of low-income or minority populations around Grand Forks AFB.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 INTRODUCTION

The effects of the proposed action and the alternatives on the affected environment are discussed in this section. The project involves construction of a miscellaneous services recreation area on Grand Forks AFB.

4.2 AIR QUALITY

4.2.1 Alternative 1 (Proposed Action)

Alternative 1 (Proposed Action) - Air Quality is considered good and the area is in attainment for all criteria pollutants. Appropriate Material Safety Data Sheet (MSDS) indicates that paintballs contain non-hazardous material, are water soluble and biodegradable. No significant impacts to air quality would result because of paintball activities. No construction is involved with the project; therefore there would be no heavy construction equipment emissions or fugitive dust.

4.2.2 Alternative 2

Impacts would be similar to those generated under the proposed action.

4.2.3 Alternative 3 (No Action)

The no action alternative would not impact air quality.

4.3 NOISE

4.3.1 Alternative 1 (Proposed Action)

The utilization of guns and the large number of people utilizing the area would create additional noise. The increase in noise would be negligible and only occur when the area was being used.

4.3.2 Alternative 2

Impacts would be similar to those generated under the proposed action.

4.3.3 Alternative 3 (No Action)

The no action alternative would not impact noise generation.

4.4 WASTES, HAZARDOUS MATERIALS, AND STORED FUELS

4.4.1 Alternative 1 (Proposed Action)

The increase in hazardous and solid wastes from construction related activities would be minimal and temporary. Construction debris would be disposed of in approved location, such as the Grand Forks Municipal Landfill, which is located within 12 miles of the construction site. All solid waste materials would be managed and transported in accordance with the state's solid and hazardous waste rules. Appropriate efforts to reduce, reuse and/or recycle waste materials is encouraged by the State of North Dakota. Inert waste should be segregated from non-inert waste, where possible, to reduce the cost of waste management.

4.4.2 Alternative 2

Impacts would be similar to those generated under the proposed action.

4.4.3 Alternative 3 (No Action)

The no action alternative would not impact hazardous or solid waste generation.

4.5 WATER RESOURCES

4.5.1 Alternative 1 (Proposed Action)

Ground Water: Provided best management practices (BMPs) are followed, there would be minimal impacts on ground water. The area was previously housing and is considered developed so the minimal soil compaction that is likely to occur should not interfere with infiltration during storm events. Water based, biodegradable paints should be utilized.

Surface Water: Surface water quality could be degraded in the short-term, during actual construction, in the immediate area. The short-term effects come from possible erosion contributing to turbidity of runoff and possible contamination from spills or leaks from construction equipment. The contractor must utilize effective methods to control surface water runoff and minimize erosion. As the site is relatively flat, this should be relatively easy to accomplish. Proper stabilization and seeding of the site upon completion of the construction would provide beneficial vegetation, controlling erosion. During operation, the contractor must maintain soil cover to prevent surface erosion. The soils at this site are erodible and if large patches are allowed to become exposed, sediment could travel off site. Appropriate grasses must be maintained at this site. Provided BMPs are utilized during design, construction, and operation and with biodegradable paints utilized, negative surface water impacts should be minimal.

Water Quality: Provided containment needs are met and BMPs are used, the proposed action would have no impact to water quality.

Waste Water: The proposed action would have no impact on wastewater.

Wetlands: The proposed action would have no direct impact on wetlands provided BMP's are utilized during design and construction. Currently, there are no wetlands in the proposed site area, but a wetland delineation project is being conducted this summer. If wetlands are identified in the paintball sited area, no paintball activities should occur in any wetlands without a Clean Water Act Section 404 permit from the United States Army Corps of Engineers. No dumping, filling, dredging, or changing of the wetland hydrologic structure is permitted without a permit.

4.5.2 Alternative 2

Alternative 2 would have minimal impacts on water resources.

4.5.3 Alternative 3 (No Action)

The no action alternative would have no impact on water resources.

4.6 BIOLOGICAL RESOURCES

4.6.1 Alternative 1 (Proposed Action)

Vegetation: Trampling and use of movable structures from paintball activities would impact vegetation by reducing coverage and compacting soils. Disturbed and/or bare areas should be re-established with native species. Specific potential phyto-toxic effects of paintballs are unknown but would appear to be inconsequential. Manufacturer information indicates that paintballs are filled with food dyes and polyethylene glycol, are non-toxic, non-caustic, water-soluble and biodegradable. The pertinent MSDS indicates paintballs are made of soft gelatin capsules containing colored liquid and are non-hazardous. The only cumulative effects anticipated would occur if more paintball use is allowed on GFAFB lands. The area proposed for this permit is not problematic for botanical resources, but more paintball use may lead to that if activities are proposed on more sensitive ground.

Noxious Weeds: Public law 93-629 mandates control of noxious weeds. Noxious weeds are known to be present in this area. Limit possible weed seed transport from infested areas to non-infested sites. Avoid activities in or adjacent to heavily infested areas or remove seed sources and propagules from site prior to conducting activities, or limit operations to non-seed producing seasons. Wash or otherwise remove all vegetation and soil from equipment before transporting to a new site. Following activities which expose the soil, mitigate by covering the area with weed seed free mulch and/or seed the area with native species. Covering the soil would reduce the germination of weed seeds, maintain soil moisture, and minimize erosion. Coordinate with base if broad-leaf herbicide applications or burning methods are needed to control the noxious weeds. These items should be included in a management plan of the playfield.

Wildlife: Paintball activities would have impacts to wildlife in the area. These areas provide foraging habitat for many mammals such as mice, rabbits, skunks, badgers, and deer. The area is unimproved, and not maintained by the grounds maintenance contractor. Due to the abundance

and mobility of these species and the profusion of natural habitats in the general vicinity, any mammalian wildlife disturbed would be able to find similar habitat in the local area. However, grassland birds and foraging hawks would be affected by paintball activities. GFAFB has reports of some species of concern protected under the Migratory Bird Treaty Act (MBTA) that include the Swainson's hawk and grasshopper sparrow. Many more grassland birds are listed as protected under the MBTA, but have not been identified on base. This area is prime habitat for grassland birds which are in dramatic decline across the entire Great Plains region primarily due to habitat loss. Any mowing activities should be postponed in this area until August 1 to protect grassland bird nests.

Threatened or Endangered Species: According to the 1994 ND Natural Heritage Inventory (1994), "There are no known federally threatened or endangered species populations on or adjacent to Grand Forks AFB." There have been bald eagle reports (November 2003) on the sewage lagoons to the east of the playfield. However there is no appropriate habitat for the eagles at the paintball playfield, and there should be no adverse consequences to them.

4.6.2 Alternative 2

Impacts would be similar to those generated under the proposed action.

4.6.3 Alternative 3 (No Action)

The no action alternative would not impact biological resources.

4.7 SOCIOECONOMIC RESOURCES

4.7.1 Alternative 1 (Proposed Action)

Secondary retail purchases would make an additional contribution to the local communities. The implementation of the proposed action, therefore, would provide a short-term, minimal beneficial impact to local retailers during the construction phase of the project.

4.7.2 Alternative 2

Impacts would be similar to those generated under the proposed action.

4.7.3 Alternative 3 (No Action)

The no action alternative would not impact socioeconomics.

4.8 CULTURAL RESOURCES

4.8.1 Alternative 1 (Proposed Action)

The proposed action has little potential to impact cultural resources. In the unlikely event any such artifacts were discovered during the construction activities, the contractor would be instructed to halt construction and immediately notify Grand Forks AFB civil engineers who would notify the State Historic Preservation Officer.

4.8.2 Alternative 2

Alternative 2 would not impact cultural resources as the facility was recently constructed.

4.8.3 Alternative 3 (No Action)

The no action alternative would not impact cultural resources.

4.9 LAND USE

4.9.1 Alternative 1 (Proposed Action)

The Grand Forks AFB Facility Board approved the siting of the miscellaneous services recreation area in December 2003.

4.9.2 Alternative 2

The Grand Forks AFB Facility Board would have to approve siting of the miscellaneous services recreation area in an alternative location.

4.9.3 Alternative 3 (No Action)

The no action alternative would not impact land use.

4.10 TRANSPORTATION SYSTEMS

4.10.1 Alternative 1 (Proposed Action)

The proposed action would have minimal adverse impact to transportation systems on base due to vehicles traveling to and from the recreation site.

4.10.2 Alternative 2

Impacts would be similar to those generated under the proposed action.

4.10.3 Alternative 3 (No Action)

The action would not impact transportation.

4.11 AIRSPACE/AIRFIELD OPERATIONS

4.11.1 Alternative 1 (Proposed Action)

The proposed action would not impact aircraft safety or airspace compatibility.

4.11.2 Alternative 2

The action would not impact aircraft safety or airspace compatibility.

4.11.3 Alternative 3 (No Action)

The no action alternative would not impact aircraft safety or airspace compatibility.

4.12 SAFETY AND OCCUPATIONAL HEALTH

4.12.1 Alternative 1 (Proposed Action)

Safety has concerns with the proposed location although they have not provided details on those concerns. Cleanup of the site would be required prior to utilization to minimize safety hazards.

4.12.2 Alternative 2

Safety has expressed no concerns with the alternative siting although there would be safety concerns due to siting near the MFH area.

4.12.3 Alternative 3 (No Action)

The no action alternative would not impact safety and occupational health.

4.13 ENVIRONMENTAL MANAGEMENT

4.13.1.1 Alternative 1 (Proposed Action)

IRP: The proposed action would not impact IRP Sites.

Geology: Trampling of soils would occur on the proposed site. This could result in disturbance and slight compaction of the top soil and exposure of mineral. The slight degree of compaction from foot traffic (less than an estimated ten percent increase in bulk density) would have little effect on growth rates of vegetation. There would be some loss of organic material, and potential for some erosion. Soils present in the proposed area include the Yemassee series. This series is

classed as erodible, and are subject to soil blowing unless protected and covered with appropriate vegetation. A native grass stand is recommended as cover to assist in soil conservation, and control of noxious weeds. In addition the use of possible shrub/tree windbreaks to control soil blowing is needed. Sustainable management plans are required to mitigate erosion sites and/or exposed soil on the playfield. Using movable structures on the playfield would cause vegetation break-down with potential for soil exposure. These disturbed areas should be reseeded, and watered to ensure proper growth of native grass species. Native species would compete with noxious weeds if cultivated properly.

Pesticides: No pesticides would be used as part of this project.

4.13.1.2 Alternative 2

Impacts would be similar to those generated under the proposed action. Soils present in the proposed area include the Gilby series.

4.13.1.3 Alternative 3 (No Action)

The no action alternative would not impact IRP Sites or geological resources. No pesticides would be used as part of this project.

4.14 ENVIRONMENTAL JUSTICE

4.14.1 Alternative 1 (Proposed Action)

EO 12898 requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. There are no minority or low-income populations in the area of the proposed action or alternatives, and, thus, there would be no disproportionately high or adverse impact on such populations.

4.14.2 Alternative 2

Impacts would be similar to those generated under the proposed action.

4.14.3 Alternative 3 (No Action)

The no action alternative would not impact environmental justice.

4.15 INDIRECT AND CUMULATIVE IMPACTS

The short-term increases in air emissions and noise during construction and the impacts predicted for other resource areas, would not be significant when considered cumulatively with other ongoing and planned activities at Grand Forks AFB and nearby off-base areas. The cumulative impact of the Proposed Action or Alternative with other ongoing construction in the area would

produce and increase in solid waste generation; however, the increase would be limited to the timeframe of each construction project. The area landfill used for construction and demolition debris does not have capacity concerns and could readily handle the solid waste generated by the various projects.

4.16 UNAVOIDABLE ADVERSE IMPACTS

The use of construction-related vehicles and their short-term impacts on noise, air quality, and traffic is unavoidable.

4.17 RELATIONSHIP BETWEEN SHORT-TERM USES AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The proposed action and alternative would involve the use of previously developed areas. No croplands, pastureland, wooded areas, or wetlands would be modified or affected as a result of implementing the Proposed Action or Alternative and, consequently, productivity of the area would not be degraded.

4.18 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Under the proposed action, fuels, manpower, economic resources, fill and other construction materials related to the construction of miscellaneous services recreation area would be irreversibly lost.

5.0 LIST OF PREPARERS

Steve Braun
USTs and Special Programs
319 CES/CEVC
525 Tuskegee Airmen Blvd
Grand Forks AFB ND 58205

Everett “Gene” Crouse
Chief, Airfield Management
319 OSS OSAA
695 Steen Blvd
Grand Forks AFB ND 58205

Heidi Durako
Natural and Cultural Resources
319 CES/CEVA
525 Tuskegee Airmen Blvd
Grand Forks AFB ND 58205

Mark Hanson
Contract Attorney
319 ARW/JA
460 Steen Blvd
Grand Forks AFB ND 58205

Gary Johnson
Ground Safety Manager
319 ARW/SEG
679 4th Avenue (Ave)
Grand Forks AFB ND 58205

Chris Klaus
Water Programs Manager
319 CES/CEVC
525 Tuskegee Airmen Blvd
Grand Forks AFB ND 58205

Lt Col Patrick McCormack
Chief of Safety
319 ARW/SE
779 Eielson St
Grand Forks AFB ND 58205

Heidi Nelson
Community Planner
319 CES/CECP
525 Tuskegee Airmen Blvd
Grand Forks AFB ND 58205

Larry Olderbak
Environmental Restoration Manager
319 CES/CEVR
525 Tuskegee Airmen Blvd
Grand Forks AFB ND 58205

Gary Raknerud
Chief, Pollution Prevention
319 CES/CEVP
525 Tuskegee Airmen Blvd
Grand Forks AFB ND 58205

Kristen Rundquist
Natural Resources/Air Program Manager
319 CES/CEVC
525 Tuskegee Airmen Blvd
Grand Forks AFB ND 58205

Capt Brad Schulte
Bioenvironmental Engineering Flight
Commander
319AMDS/SGPB
1599 J St
Grand Forks AFB ND 58205

6.0 LIST OF AGENCIES AND PERSONS CONSULTED AND/OR PROVIDED COPIES

Mr. Terry Dwelle
State Health Officer
North Dakota Department of Health
600 East Boulevard Ave
Bismarck, ND 58505-0200

Mr. Merlan E. Paaverud
State Historic Preservation Officer
State Historical Society of North Dakota
612 East Boulevard Ave
Bismarck ND 58505-0200

Mr. Dean Hildebrand
Commissioner
North Dakota Game and Fish
100 North Bismarck Expressway
Bismarck, ND 58501

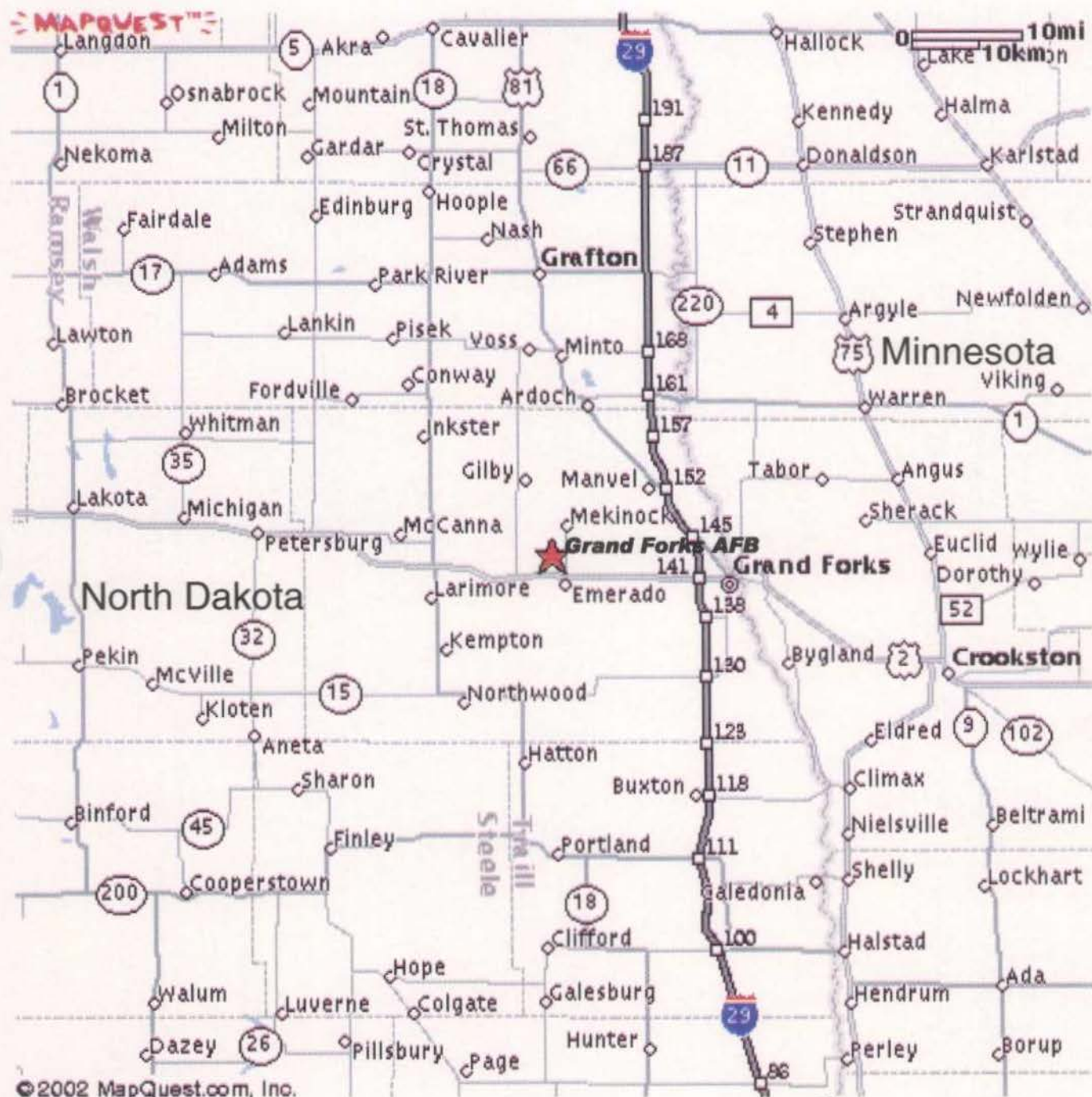
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APPENDIX A
LOCATION MAP

Grand Forks AFB, ND



1 COMPONENT
AF (AMC)

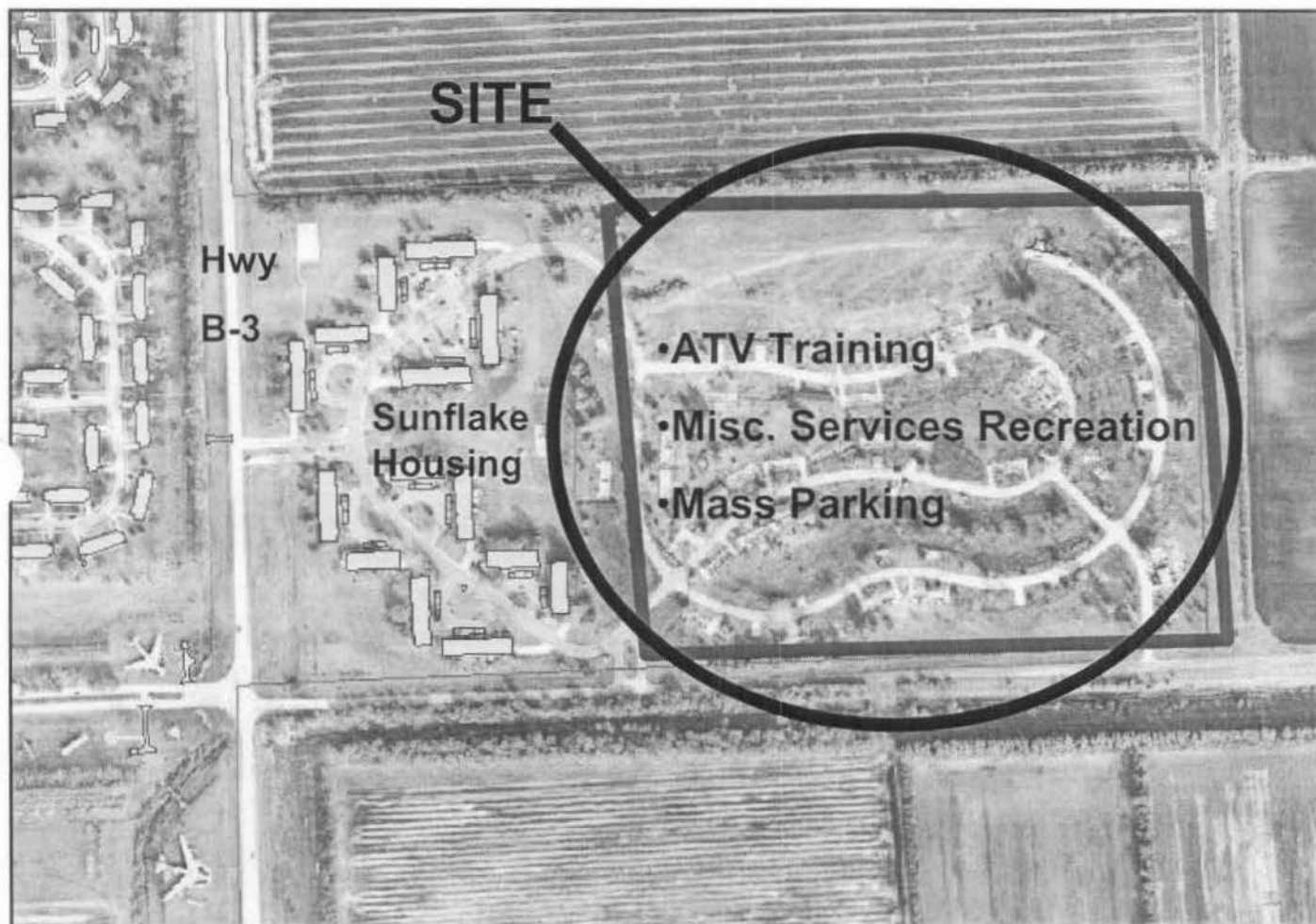
FY 2004 MILITARY CONSTRUCTION DATA

2 DATE
05 Nov 03

3 INSTALLATION AND LOCATION
GRAND FORKS AFB, NORTH DAKOTA

4 PROJECT TITLE
ATV Training /Misc. Services Recreation/ Land Use Change/Mass Parking

5 PROJECT NUMBER
NA



LOCATION PLAN

APPENDIX B
CULTURAL RESOURCE PROBABILITY MAP

Figure 3.5
Survey Areas and
Probabilities

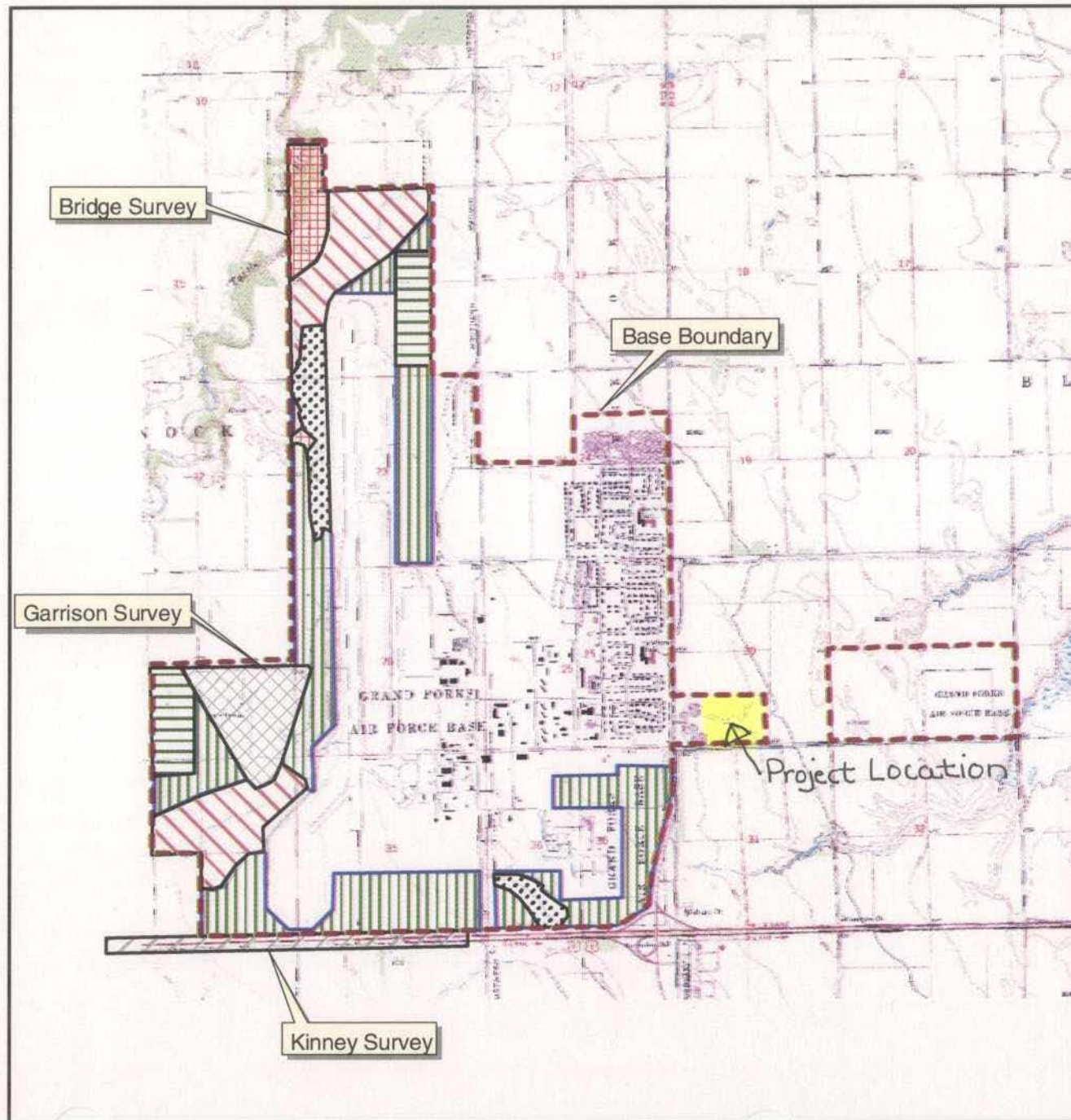
Grand Forks Air Force Base
Cultural Resources Management Plan

Legend

- y Historic Bridge Inventory Survey
- Base Boundary
- High Probability
- Medium Probability (near water)
- Kinney Survey
- Medium Probability (beach ridge)
- Peace Keeper Rail Garrison Survey
- Low Probability (distance from water)
- Low Probability (10% sample)
- Previously Disturbed

2000 0 2000 4000 Feet

Scale: 1:50000
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Figure Number: 3.5
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APPENDIX C
ENVIRONMENTAL SITE MAP



Grand Forks AFB Environmental Sites (SE)

- Above Ground Storage Tanks (Fuel)
- ▲ Abandoned Fuel Lines
- ▲ Building 622 - Acid Dip Room
- Helicopter Wash Area
- ▲ Oil/Water Separator
- ▲ Satellite Accumulation Areas (Haz Waste)
- ▲ Scrap Storage Area
- S.H.P.O. (Buildings under consideration)
- ▲ Underground Waste Storage
- Underground Storage Tanks (Fuel)

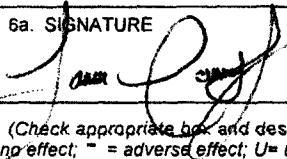
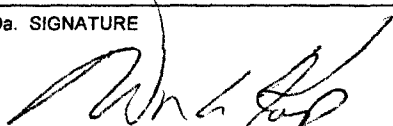
Hydrography-flood zone area
 floodplain zone centroid

- Ditches/Streams
- ▨ IRP Sites
- ▨ Landfill Caps
- Trees



08 May 01/KS

APPENDIX D
AF FORM 813

REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS		Report Control Symbol RCS: 2004-029	
INSTRUCTIONS: Section I to be completed by Proponent; Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).			
SECTION I - PROPONENT INFORMATION			
1. TO (Environmental Planning Function) 319 CES/CEVA	2. FROM (Proponent organization and functional address symbol) 319 SVS/SVR	2a. TELEPHONE NO. 7-3672	
3. TITLE OF PROPOSED ACTION Construct Miscellaneous Services Recreation Area			
4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date) See Attached.			
5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action.) See Attached.			
6. PROPONENT APPROVAL (Name and Grade) Lawrence Cannedy	6a. SIGNATURE 	6b. DATE 3/9/04	
SECTION II - PRELIMINARY ENVIRONMENTAL SURVEY. (Check appropriate box and describe potential environmental effects including cumulative effects.) (+ = positive effect; 0 = no effect; - = adverse effect; U = unknown effect)			
7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)	<input type="checkbox"/> +	<input checked="" type="checkbox"/> 0	<input type="checkbox"/> -
8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)	<input type="checkbox"/> +	<input type="checkbox"/> 0	<input checked="" type="checkbox"/> -
9. WATER RESOURCES (Quality, quantity, source, etc.)	<input type="checkbox"/> +	<input type="checkbox"/> 0	<input checked="" type="checkbox"/> -
10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity-distance, bird/wildlife aircraft hazard, etc.)	<input type="checkbox"/> +	<input checked="" type="checkbox"/> 0	<input type="checkbox"/> -
11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.)	<input type="checkbox"/> +	<input type="checkbox"/> 0	<input checked="" type="checkbox"/> -
12. BIOLOGICAL RESOURCES (Wetlands/floodplains, threatened or endangered species, etc.)	<input type="checkbox"/> +	<input type="checkbox"/> 0	<input checked="" type="checkbox"/> -
13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)	<input type="checkbox"/> +	<input checked="" type="checkbox"/> 0	<input type="checkbox"/> -
14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)	<input type="checkbox"/> +	<input checked="" type="checkbox"/> 0	<input type="checkbox"/> -
15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)	<input checked="" type="checkbox"/> +	<input type="checkbox"/> 0	<input type="checkbox"/> -
16. OTHER (Potential impacts not addressed above.)	<input type="checkbox"/> +	<input checked="" type="checkbox"/> 0	<input type="checkbox"/> -
SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION			
17. <input type="checkbox"/> PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # _____ ; OR <input checked="" type="checkbox"/> PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.			
18. REMARKS This action is not "regionally significant" and does not require a conformity determination in accordance with 40 CFR 93.153(1). The total emission of criteria pollutants from the proposed action are below the de minimus thresholds and less than 10 percent of the Air Quality Region's planning inventory.			
ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade) WAYNE A. KOOP, R.E.M., GM-13 Environmental Management Flight Chief	19a. SIGNATURE 	19b. DATE 11/26/04	

Block 4: Purpose and Need for Action

4.1 Purpose: The purpose of the proposed action is to construct a miscellaneous services recreation area that could officially be used for paintball.

4.2 Need for Action: A miscellaneous services recreation area is strongly needed by base personnel and dependents that participate in the sport of the paintball. Currently, there isn't a designated location for this activity; thereby, causing safety concerns. Paintball involves weapons that project balls of paint at a fairly high speed. A secluded area designated for paintball would prevent people, including base housing occupants and children, and structures such as buildings or vehicles from getting hit. Problems have occurred with people unofficially using "CE Park", located in the northwest corner of the base near Turtle River, for paintball. Officially, bow hunting is allowed in this area during the deer bow hunting season creating a dangerous situation. Additionally, Security Forces often utilize Outdoor Recreations' Recreational Vehicle (RV) storage lot and storage bay for training of military working dogs. This is dangerous because this area is high traffic and customers come enter and exit the RV storage lot and storage bay on a daily basis. A designated paintball area could also be utilized for training of military working dogs.

Block 5: Description of Proposed Action and Alternatives

5.1 Proposed Action: Under the proposed action, Grand Forks AFB would construct a miscellaneous services recreation area that could officially be used as a paintball field in the previous Dakota Military Family Housing (MFH) Area. Houses have been removed from the area but roads and foundations still exist. No roads, trees, or concrete would need to be removed. A contractor would be responsible for the preparation of the field including barricade construction and weed removal. The area would be fitted with signs stating that entry or trespassing on this property has to be authorized through Outdoor Recreation or Security Forces. The field would be fitted with movable objects and walls that could be set up and taken down easily. A building would be constructed by Security Forces for their military working dog training. This location would keep the military working dogs away from MFH and the general base population preventing anyone from getting in the way of the dogs. Security Forces would also practice combat movements in the area. No paintball would occur at these times. A fence may be included as part of the project. Funding limitations may require the fence be constructed after operation of the facility has generated the required funds.

5.2 Alternative 1: The alternative action would construct the paint ball area between the Bike Motocross (BMX) track and Holly MFH. This is not a viable alternative due to the proximity to housing and other structures such as building, cars, and base housing occupants. Paint would potentially end up on buildings and vehicles causing tension between the facility and the base population. It is likely that children would be located in the area as it is between housing and the BMX track. There would be a safety concern for people in the area due to the military dog training. People wandering through the area would run the risk of getting bitten by one of the dogs if they got in the way.

5.3 No Action Alternative: The no action alternative would not construct a paintball facility on Grand Forks AFB. Personnel and dependents would have to travel to the nearest facility available for this activity which is Area 13 in Larimore or playing unofficially in CE park where they run the risk of being mistaken for wild game and being shot by bow hunters.

APPENDIX E
MSDS FOR PAINTBALLS

PROCAPS
Soft Gel Encapsulating Co.

Procaps Soft Gel Encapsulation Company
57e, Hymus, Pointe-Claire
Québec, Canada H9R 4T2
TEL: (514) 630-6666
FAX: (514) 630-6668

Material Safety Data Sheet

PRODUCT NAME:		PAINTBALLS	
SECTION 1 - INGREDIENTS			
CHEMICAL IDENTITY:	INGREDIENTS POLYETHYLENE GLYCOL GELATINE GLYCERINE USP SORBITOL FD&C/NF APPROVED COLOURANTS		CAS NO 25322-68-3 9000-70-8 56-81-5 50-70-4
SECTION 2 - PRODUCT INFORMATION			
PRODUCT IDENTIFIER:		SOFT GEL CAPSULE	
PRODUCT USE:		RECREATIONAL	
PRODUCT DECOMPOSITION:		BIODEGRADABLE (ENVIRONMENTALLY FRIENDLY)	
SECTION 3 - PHYSICAL DATA (FILL MATERIAL)			
PHYSICAL STATE: LIQUID	ODOUR AND APPEARANCE: NO ODOUR DEPENDENT ON COLOURANT		ODOUR THRESHOLD: N/A
SPECIFIC GRAVITY 1,200g/ml	CO-EFFICIENT OF WATER / OIL DISTRIBUTION: N/A		VAPOUR PRESSURE: N/A
BOILING POINT (°C) 200 °C	FREEZING POINT (°C) 5-12 °C	pH 8-9	VAPOUR DENSITY (AIR = 1) 1
EVAPORATION RATE (Bulb = 1)	N/A	PERCENT VOLATILE (BY VOLUME)	N/A
SECTION 4 - PREPARATION INFORMATION			
PREPARED BY: TECHNICAL SERVICES	PHONE NO (514) 630-6666	DATE 11-Sep-98	

EIAP Checklist

Title Paintball RCS# 04-029

Coordination Email Sent: 11/24/03 Date Received
 ADS/SGGB (Bio) 12/11/03
 ARW/JA (Legal) 11/26/03
 ARW/SE (Safety) 11/24/03
 CES/CECP (Community Planner) 11/24/03
 CES/CEV (Env) 11/24/03
 CES/CEVA (Cultural) 11/24/03
 CES/CEVC (Air/Natural Mgr) 12/13/03
 CES/CEVC (Asbestos/LBP/tanks) 11/24/03
 CES/CEVC (Water Mgr) 12/13/03
 CES/CEVP (Haz Mat/Waste) 11/25/03
 CES/CEVR (IRP) 11/26/03
 OSS/OSA (Airfield Operations) 11/24/03

Public Notice Expiration: 2/5/04
 Coordination w/Public Affairs 12/17/03
 Base Leader 12/19/03
 GF Herald 1/6/04

Route 3-11-04
 CEV 2-18-04
 Legal sent 2/11/04 2-18-04
 ARW/CV NH

External 12/19/03
 ND Department of Health 1/4/04
 ND Game and Fish 1/5/04
 State Historical Society of ND 12/29/03

ROUTING AND TRANSMITTAL SLIP

Date

3-11-04

Name, office symbol, room number, building, Agency/ Post)	Initials	Date
1. KOOP, CEU	(initials)	15
2.		
3.		
4.		
5.		

Action	File	Note and Return
<input checked="" type="checkbox"/> Approval	For Clearance	Per Conversation
As Requested	For Correction	Prepare Reply
Circulate	For Your Information	See Me
Comment	Investigate	<input checked="" type="checkbox"/> Signature
Coordination	Justify	

REMARKS

Sign FONSI #
813 for "Construct
miscellaneous Services
Recreation Area"

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/ Post)	Room No. — Bldg.
Rundquist	Phone No. - 4774

NSN 7540-00-935-5862
5041-103



OPTIONAL FORM 41 (Rev. 1-94)
Prescribed by GSA
UNICOR FPI - SST

ROUTING AND TRANSMITTAL SLIP

Date

11 Feb 04

TO: (Name, office symbol, room number,
building, Agency/ Post)

319 ARW/JA

Initials

mmw

Date

15 Feb

2.

See memo

3.

4.

5.

Action	File	Note and Return
Approval	For Clearance	Per Conversation
As Requested	For Correction	Prepare Reply
Circulate	For Your Information	See Me
Comment	Investigate	Signature
Coordination	Justify	

REMARKS

AF FORM 813

Environmental Assessment

Construct Miscellaneous Services
Recreation Area

Public Notice

GF Herald 1/6/04 Leader 12/19/03

DO NOT use this form as a RECORD of approvals, concurrences, disposals,
clearances, and similar actions

FROM: (Name, org. symbol, Agency/ Post)

Kristen Rundquist 319 CES/CEVC

Room No. — Bldg.

410

Phone No.

747-4774

NSN 7540-00-935-5862
5041-103OPTIONAL FORM 41 (Rev. 1-94)
Prescribed by GSA
UNICOR FPI - SST

DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 319TH AIR REFUELING WING (AMC)
GRAND FORKS AIR FORCE BASE, NORTH DAKOTA



18 February 2004

MEMORANDUM FOR 319 CES/CEVA

FROM: 319 ARW/JA

SUBJECT: Construct Miscellaneous Services Recreation Area EA/FONSI

1. I reviewed the Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the above-referenced project. The proposed EA and FONSI comply with the requirements of 32 CFR Part 989. They are both legally sufficient.
2. The EA contains the need for the proposal, alternatives to the proposal, environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted for the EA preparation. The EA and FONSI were made available for public comment in the Base Leader (19 December 2003) and the *Grand Forks Herald* (6 January 2004). No comments were received. From a legal perspective the project does not have a significant environmental impact. Therefore, the EA is legally sufficient and a FONSI is appropriate.
3. If you have any questions about these comments, please contact me at 7-3606.

A handwritten signature in black ink, appearing to read "Mark W. Hanson".

MARK W. HANSON, GS-12, DAF
Chief, General Law

I concur.

A handwritten signature in black ink, appearing to read "Barr D. Younger, Jr.".

BARR D. YOUNKER, JR., Lt Col, USAF
Staff Judge Advocate

Hanson Mark Civ 319 ARW/JA

From: Rundquist Kristen A Civ 319 CES/CEVC
Time: Tuesday, February 17, 2004 4:44 PM
Subject: Hanson Mark Civ 319 ARW/JA
FW: EA/FONSI

Mark,

The public notice for the project, Construct Miscellaneous Services Recreation Area, was advertised in the base leader on 12/19/03 and the GF Herald on 01/06/04. I am assuming I was supposed to send over info on that - sorry. I am just learning the process. If there is anything else I didn't include, please let me know.

Thanks,
Kristen

-----Original Message-----

From: Koop Wayne A Civ 319 CES/CEV
Sent: Tuesday, February 17, 2004 4:15 PM
To: Rundquist Kristen A Civ 319 CES/CEVC
Subject: FW: EA/FONSI

fya

Wayne A. Koop DSN 362-4590
CES Environmental Manager

-----Original Message-----

From: Hanson Mark Civ 319 ARW/JA
Time: Tuesday, February 17, 2004 3:07 PM
Koop Wayne A Civ 319 CES/CEV
McCullough David Civ 319 CES/CEVC; Younker Barr D LtCol 319 ARW/JA
Subject: EA/FONSI

I am reviewing the EA/FONSI to Construct Miscellaneous Services Recreation Area. Did the public have the opportunity to comment?

When was it published in the GF Herald??

MARK W. HANSON, GS-12 DAF
Chief, General Law
319th Air Refueling Wing
Grand Forks AFB North Dakota
Phone: DSN 362-3618; 701-747-3618
Fax: DSN 362-4766; 701-747-4766

CONFIDENTIALITY NOTICE: This electronic transmission may contain attorney work-product or information protected under the attorney-client privilege, both of which are protected from disclosure under the Freedom of Information Act, 5 USC 552. Do not release outside of DoD channels without prior authorization from the sender.

AIR FORCE BASE PUBLIC NOTIFICATION

Grand Forks Air Force Base has proposed the construction of a miscellaneous services recreation area.

An environmental assessment has been conducted and a "finding of no significant impact has been determined for the action."

Anyone who would like to view the support documents to this action should contact the 319th Air Refueling Wing Public Affairs Office within the next 30 days at 747-5017.
(January 6, 8, 2004)

AIR FORCE BASE PUBLIC NOTIFICATION

Grand Forks Air Force Base has proposed the construction of a miscellaneous services recreation area.

An environmental assessment has been conducted and a "finding of no significant impact has been determined for the action."

Anyone who would like to view the support documents to this action should contact the 319th Air Refueling Wing Public Affairs Office within the next 30 days at 747-5017.
(January 6, 8, 2004)

AFFIDAVIT OF PUBLICATION

STATE OF NORTH DAKOTA }
COUNTY OF GRAND FORKS } SS.

Robert of said State and County being first duly sworn, on oath says:

That { she } is { a representative of the GRAND FORKS HERALD, INC.,

publisher of the Grand Forks Herald, Morning Edition, a daily newspaper of general circulation, printed and published in the City of Grand Forks, in said County and State, and has been during the time hereinafter mentioned, and that the advertisement of

Construction notice
a printed copy of which is hereto annexed, was printed and published in every copy of the following issues of said newspaper, for a period of 5 time (s) to wit:

<u>1-6</u>	Yr. <u>01</u>	Yr. _____
<u>1-8</u>	Yr. <u>01</u>	Yr. _____
_____	Yr. _____	Yr. _____
_____	Yr. _____	Yr. _____

and that the full amount of the fee for the publication of the annexed notice inures solely to the benefit of the publishers of said newspaper; that no agreement or understanding for a division thereof has been made with any other person and that no part thereof has been agreed to be paid to any person whomsoever and the amount of said fee is \$ 16.56;

That said newspaper was, at the time of the aforesaid publication, the duly elected and qualified Official Newspaper within said County, and qualified in accordance with the law of the State of North Dakota to do legal printing in said County and State.

Subscribed and sworn to before me this 9 day of

Jan A.D. 04

Elaine Twardo
Notary Public, Grand Forks, ND

Publication Fee \$ 16.56



DEPARTMENT OF THE AIR FORCE
319TH CIVIL ENGINEER SQUADRON
GRAND FORKS AIR FORCE BASE, NORTH DAKOTA



Mr. Merlen E. Paaverud
State Historic Preservation Officer
State Historical Society of North Dakota
612 East Boulevard Avenue
Bismarck ND 58505-0200

RE: Environmental Assessment for Grand Forks Air Force Base, North Dakota.

Dear Mr. Paaverud:

The U.S. Air Force is preparing an environmental assessment (EA) on the construction of a miscellaneous services recreation area to be used for paintball. Attached is a copy of the EA. Please review the document and identify any additional resources within your agency's responsibility that may be impacted by the action. Comments should be sent within 15 days of receipt of this letter to:

Ms. Heidi Durako, 319 CES/CEVA
525 Tuskegee Airmen Blvd.
Grand Forks AFB, ND 58205-6434

Your assistance in providing information is greatly appreciated. If you have any questions, please call Ms. Durako at 701-747-4774.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne A. Koop", is written over the typed name.

WAYNE A. KOOP
Environmental Management Flight Chief

Attachment:
Environmental Assessment



**STATE
HISTORICAL
SOCIETY
OF NORTH DAKOTA**

John Hoeven
Governor of North Dakota

**North Dakota
State Historical Board**

Diane K. Larson
Bismarck - President

Marvin L. Kaiser
Williston - Vice President

Albert I. Berger
Grand Forks - Secretary

Chester E. Nelson, Jr.
Bismarck

Gerold Gerntholz
Valley City

A. Ruric Todd III
Jamestown

Sara Otte Coleman
*Director
Tourism Division*

Kathi Gilmore
State Treasurer

Alvin A. Jaeger
Secretary of State

Douglass Prchal
*Director
Parks and Recreation
Department*

David A. Sprynczynatyk
*Director
Department of Transportation*

John E. Von Rueden
Bismarck

Merlan E. Paaverud, Jr.
Director

*Accredited by the
American Association
of Museums*

December 29, 2003

Heidi Durako, 319 CES/CEVA
525 Tuskegee Airmen Blvd
Grand Forks AFB, ND 58205-6434

ND SHPO Ref.: 97-0527, Draft EA, Miscellaneous Services Recreation Area,
Grand Forks AFB, ND.

Dear Ms. Durako:

We have reviewed: *Environmental Assessment: Construct Miscellaneous Services Recreation Area At Grand Forks AFB, North Dakota* (Draft Version, 11 Dec 03), and have the following comments:

Appendix A: A location map should have been provided in the draft.

Appendix B: A cultural resource probability map should have been provided in the draft.

Thank you for the opportunity to review this project. Please include the ND SHPO Reference number listed above in any further correspondence for this specific project. If you have any questions please contact Duane Klinner at (701) 328-3576.

Sincerely,

Merlan E. Paaverud, Jr.
State Historic Preservation Officer
(North Dakota)



**STATE
HISTORICAL
SOCIETY
OF NORTH DAKOTA**

John Hoeven
Governor of North Dakota

February 19, 2004

**North Dakota
State Historical Board**

Diane K. Larson
Bismarck - President

Marvin L. Kaiser
Williston - Vice President

Albert I. Berger
Grand Forks - Secretary

Chester E. Nelson, Jr.
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David A. Sprynczynatyk
*Director
Department of Transportation*

John E. Von Rueden
Bismarck

Merlan E. Paaverud, Jr.
Director

Heidi Durako, 319 CES/CEVA
525 Tuskegee Airmen Blvd
Grand Forks AFB, ND 58205-6434

ND SHPO Ref.: 97-0527, Draft EA, Miscellaneous Services Recreation Area,
Grand Forks AFB, ND.

Dear Ms. Durako:

We have reviewed the additional information provided by your agency on
February 12, 2004 for: *Environmental Assessment: Construct Miscellaneous Services
Recreation Area At Grand Forks AFB, North Dakota* (Draft Version, 11 Dec 03).

We have no further comments on the draft Environmental Assessment, and
look forward to receiving the next (final?) version of the document.

Thank you for the opportunity to review this project. Please include the ND
SHPO Reference number listed above in any further correspondence for this
specific project. If you have any questions please contact Duane Kliner at
(701) 328-3576.

Sincerely,

Merlan E. Paaverud, Jr.
State Historic Preservation Officer
(North Dakota)

*Accredited by the
American Association
of Museums*



DEPARTMENT OF THE AIR FORCE
319TH CIVIL ENGINEER SQUADRON
GRAND FORKS AIR FORCE BASE, NORTH DAKOTA

18 DEC 2005

Mr. Dean Hildebrand, Commissioner
North Dakota Game and Fish
100 North Bismarck Expressway
Bismarck, ND 58501

RE: Environmental Assessment for Grand Forks Air Force Base, North Dakota.

Dear Mr. Hildebrand:

The U.S. Air Force is preparing an environmental assessment (EA) on the construction of a miscellaneous services recreation area to be used for paintball. Attached is a copy of the EA. Please review the document and identify any additional resources within your agency's responsibility that may be impacted by the action. Comments should be sent within 15 days of receipt of this letter to:

Ms. Heidi Durako, 319 CES/CEVA
525 Tuskegee Airmen Blvd.
Grand Forks AFB, ND 58205-6434

Your assistance in providing information is greatly appreciated. If you have any questions, please call Ms. Durako at 701-747-4774.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne A. Koop", is written over the typed name.

WAYNE A. KOOP

Environmental Management Flight Chief

Attachment:
Environmental Assessment



DEPARTMENT OF THE AIR FORCE
319TH CIVIL ENGINEER SQUADRON
GRAND FORKS AIR FORCE BASE, NORTH DAKOTA

19 DEC 2003

Mr. Dean Hildebrand, Commissioner
North Dakota Game and Fish
100 North Bismarck Expressway
Bismarck, ND 58501

RE: Environmental Assessment for Grand Forks Air Force Base, North Dakota.

Dear Mr. Hildebrand:

The U.S. Air Force is preparing an environmental assessment (EA) on the construction of a miscellaneous services recreation area to be used for paintball. Attached is a copy of the EA. Please review the document and identify any additional resources within your agency's responsibility that may be impacted by the action. Comments should be sent within 15 days of receipt of this letter to:

Ms. Heidi Durako, 319 CES/CEVA
525 Tuskegee Airmen Blvd.
Grand Forks AFB, ND 58205-6434

Your assistance in providing information is greatly appreciated. If you have any questions, please call Ms. Durako at 701-747-4774.

Sincerely,

WAYNE A. KOOP
Environmental Management Flight Chief

Attachment:
Environmental Assessment



North Dakota Game & Fish Dept.
100 N. Bismarck Expressway
Bismarck, ND 58501-5095

We have reviewed the project and foresee no identifiable conflict with wildlife or wildlife habitat based on the information provided.

(for)

Michael G. McKenna
Chief, Conservation & Communication Division
Date: 11/5/04



DEPARTMENT OF THE AIR FORCE
319TH CIVIL ENGINEER SQUADRON
GRAND FORKS AIR FORCE BASE, NORTH DAKOTA

19 DEC 2003

Mr. Terry Dwelle
State Health Officer
North Dakota Department of Health
600 East Boulevard Avenue
Bismarck, ND 58505-0200

RE: Environmental Assessment for Grand Forks Air Force Base, North Dakota.

Dear Mr. Dwelle:

The U.S. Air Force is preparing an environmental assessment (EA) on the construction of a miscellaneous services recreation area to be used for paintball. Attached is a copy of the EA. Please review the document and identify any additional resources within your agency's responsibility that may be impacted by the action. Comments should be sent within 15 days of receipt of this letter to:

Ms. Heidi Durako, 319 CES/CEVA
525 Tuskegee Airmen Blvd.
Grand Forks AFB, ND 58205-6434

Your assistance in providing information is greatly appreciated. If you have any questions, please call Ms. Durako at 701-747-4774.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne A. Koop", is written over the printed name.

WAYNE A. KOOP
Environmental Management Flight Chief

Attachment:
Environmental Assessment



NORTH DAKOTA DEPARTMENT OF HEALTH
Environmental Health Section

Location:

1200 Missouri Avenue
Bismarck, ND 58504-5264

Fax #:

701-328-5200

Mailing Address:

P.O. Box 5520
Bismarck, ND 58506-5520

January 2, 2004

Ms. Heidi Durako
319 CES/CEVA
525 Tuskegee Airmen Blvd.
Grand Forks AFB, ND 58205-6434

Re: Draft Environmental Assessment for Construction
of a Miscellaneous Services Recreation Area
Grand Forks Air Force Base, Grand Forks County

Dear Ms. Durako:

This department has reviewed the information concerning the above-referenced project submitted under date of December 19, 2003, with respect to possible environmental impacts.

This department believes that environmental impacts from the proposed construction will be minor and can be controlled by proper construction methods. With respect to construction, we have the following comments:

1. Care is to be taken during construction activity near any water of the state to minimize adverse effects on a water body. This includes minimal disturbance of stream beds and banks to prevent excess siltation, and the replacement and revegetation of any disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil and grease that may reach the receiving water from equipment maintenance, and/or the handling of fuels on the site. Guidelines for minimizing degradation to waterways during construction are attached.
2. Projects disturbing one or more acres are required to have a permit to discharge storm water runoff until the site is stabilized by the reestablishment of vegetation or other permanent cover. Also, cities may impose additional requirements and/or specific best management practices for construction affecting their storm drainage system. Check with the local officials to be sure any local storm water management considerations are addressed.
3. All solid waste materials must be managed and transported in accordance with the state's solid and hazardous waste rules. Appropriate efforts to reduce, reuse and/or recycle waste materials are strongly encouraged. As appropriate, segregation of inert waste from non-inert waste can generally reduce the cost of waste management. Further information on waste management and recycling is available from the Department's Division of Waste Management at (701) 328-5166.

Environmental Health
Section Chief's Office
701-328-5150

Air
Quality
701-328-5188

Municipal
Facilities
701-328-5211

Waste
Management
701-328-5166

Water
Quality
701-328-5210

Website: www.health.state.nd.us/ndhd/environ

Printed on recycled paper.

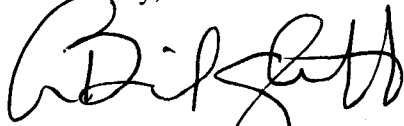
4. We have noted a number of errors in the Air Quality Section of the Assessment. These include:
- 1) The Prevention of Significant Deterioration (PSD) program establishes allowable incremental increases of SO₂, PM₁₀ (not total suspended particulate) and nitrogen dioxide (NO₂).
 - 2) Regarding the significant increase in emissions levels established in the PSD rules, there is also a 25 ton/yr level for total particulate.
 - 3) In the sentence "Ground disturbing activities create PM₁₀ and particulate matter 25 microns in diameter (PM_{2.5})," the 25 microns should be 2.5 microns.
 - 4) In the table 3.2-2, the NDAAQS for CO are 40,000 µg/m³ (not 40) and 10,000 µg/m³ (not 10).
 - 5) The NDAAQS for H₂S also includes an instantaneous standard of 14,000 µg/m³ (10 ppm).
 - 6) The State has not adopted the 8-hr ozone standard yet, "none" should be added to the NDAAQS column.

The department owns no land in or adjacent to the proposed improvements, nor does it have any projects scheduled in the area. In addition, we believe the proposed activities are consistent with the State Implementation Plan for the Control of Air Pollution for the State of North Dakota.

These comments are based on the information provided about the project in the above-referenced submittal. The U.S. Army Corps of Engineers may require a water quality certification from this department for the project if the project is subject to their Section 404 permitting process. Any additional information which may be required by the U.S. Army Corps of Engineers under the process will be considered by this department in our determination regarding the issuance of such a certification.

If you have any questions regarding our comments, please feel free to contact this office.

Sincerely,



L. David Glatt, Chief
Environmental Health Section

LDG:cc
Attach.



NORTH DAKOTA DEPARTMENT OF HEALTH

Environmental Health Section

Location:

1200 Missouri Avenue
Bismarck, ND 58504-5264

Fax #:

701-328-5200

Mailing Address:

P.O. Box 5520
Bismarck, ND 58506-5520

December 2000

Construction and Environmental Disturbance Requirements

These represent the minimum requirements of the North Dakota Department of Health. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect the waters of the State of North Dakota. All projects will be designed and implemented to restrict the losses or disturbances of soil, vegetative cover, and pollutants (chemical or biological) from a site.

Soils

Prevent the erosion of exposed soil surfaces and trapping sediments being transported. Examples include, but are not restricted to, sediment dams or berms, diversion dikes, hay bales as erosion checks, riprap, mesh or burlap blankets to hold soil during construction, and immediately establishing vegetative cover on disturbed areas after construction is completed. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, or land resources will be protected against compaction, vegetation loss, and unnecessary damage.

Surface Waters

All construction which directly or indirectly impacts aquatic systems will be managed to minimize impacts. All attempts will be made to prevent the contamination of water at construction sites from fuel spillage, lubricants, and chemicals, by following safe storage and handling procedures. Stream bank and stream bed disturbances will be controlled to minimize and/or prevent silt movement, nutrient upsurges, plant dislocation, and any physical, chemical, or biological disruption. The use of pesticides or herbicides in or near these systems is forbidden without approval from this Department.

Fill Material

Any fill material placed below the high water mark must be free of top soils, decomposable materials, and persistent synthetic organic compounds (in toxic concentrations). This includes, but is not limited to, asphalt, tires, treated lumber, and construction debris. The Department may require testing of fill materials. All temporary fills must be removed. Debris and solid wastes will be removed from the site and the impacted areas restored as nearly as possible to the original condition.

News Briefs

Construction of mass mobility parking lot

The base has proposed the construction of a mass mobility parking lot.

An environmental assessment has been conducted, and a finding of "no significant impact" has been determined for the action.

Anyone who would like to view the support documents to this action should contact the 319th Air Refueling Wing public affairs office within the next 30 days at 747-5017.

Construction of recreation area

The base has proposed the construction of a miscellaneous services recreation area.

An environmental assessment has been conducted, and a finding of "no significant impact" has been determined for the action.

Anyone who would like to view the support documents to this action should

contact the 319th Air Refueling Wing public affairs office within the next 30 days at 747-5017.

Blood, Bone Marrow Drive

There will be a blood, bone marrow drive Jan. 21 and 22.

Information about donating is available through many sources.

Qualification information, as well as squadron representatives, are listed on the W3 in the "What's Hot" section.

As a bonus, all individuals who attempt to donate for either program will be eligible for the drawing of an official Minnesota Vikings jersey with signatures from four players.

Visit the W3 and get the details.

The DAK-MIN Blood Bank prefers to have donors pre-register in order to plan their days. However, they will accept walk-ins. Walk-ins must be prepared to wait.

For details, call 1st Lt. Edward Bunce at 747-4585.

Thrift Shop

The Thrift Shop is having a half-price sale on all thrift clothing for the month of December.

Busing Concerns

All comments or concerns about Twining or Eielson school busing can be directed to Mr. Ed Vida, BMAR Bus Project Manager, at 594-5480.

If you feel that your situation was not resolved to your satisfaction, call Master Sgt. Donald Sandbothe, Quality Assurance, at 747-4565.

Base member selected for OTS

Master Sgt. Michael Whitmore, 319th Maintenance Squadron, was selected for Officer Training School.

Presidential primary elections

The District of Columbia Presidential primary election is scheduled for Jan.

13, and the New Hampshire Presidential primary is scheduled for Jan. 27.

For details, contact your unit voting assistance counselor, or Maj. Robin White-Reed at 747-5373 or via email at robin.white-reed@grandforks.af.mil.

Christmas Dinner at the WAR Center

The Airmen's Activity Council is hosting Christmas Dinner at the Warrior Airmen Recreation Center.

All airmen are invited to attend. The dinner starts at 6 p.m.

The snack bar will not be open.

For details, contact the WAR Center at 747-5733, or an AAC representative

Next *The Leader* Issue

The next issue of *The Leader* will be Jan. 9, 2004.

The Leader is accepting submissions for that issue until Jan. 5, 2004.

The Leader staff wishes Happy Holidays to all.

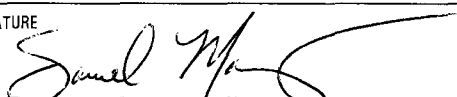
REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS

Report Control Symbol

RCS: 04-029

INSTRUCTIONS: Section I to be completed by Proponent; Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).

SECTION I - PROPONENT INFORMATION

1. TO (Environmental Planning Function) 319 CES/ CEVA	2. FROM (Proponent organization and functional address symbol) 319 SVS/SVR	2a. TELEPHONE NO. 7-3217
3. TITLE OF PROPOSED ACTION land for a paintball field		
4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date) We want to start a paintball facilit on base and we need an area to place it		
5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action.) attached		
6. PROPONENT APPROVAL (Name and Grade) Samuel Manno 2Lt	6a. SIGNATURE 	6b. DATE

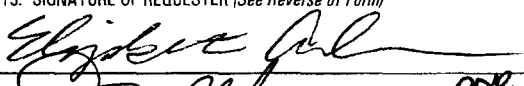
SECTION II - PRELIMINARY ENVIRONMENTAL SURVEY. (Check appropriate box and describe potential environmental effects including cumulative effects.) (+ = positive effect; 0 = no effect; - = adverse effect; U= unknown effect)

	+	0	-	U
7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)				
8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)				
9. WATER RESOURCES (Quality, quantity, source, etc.)				
10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity-distance, bird/wildlife aircraft hazard, etc.)				
11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.)				
12. BIOLOGICAL RESOURCES (Wetlands/floodplains, threatened or endangered species, etc.)				
13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)				
14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)				
15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)				
16. OTHER (Potential impacts not addressed above.)				

SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION

17.	<input type="checkbox"/> PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # _____ ; OR <input type="checkbox"/> PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.
18. REMARKS	
ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade)	19a. SIGNATURE
	19b. DATE

LC 34-029

BASE CIVIL ENGINEER WORK REQUEST (See Reverse for Instructions)				Form Approved OMB No. 0704-0188	
<small>Public reporting burden for this collection of information is estimated to average .3 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to the Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project 0704-0188, Washington DC 20503. Please DO NOT RETURN your form to either of these addresses. Send your completed form to HQ AFESCIDEMG.</small>					
SECTION I - TO BE COMPLETED BY REQUESTER					
1. FROM (Organization) 319th SVS		2. OFFICE SYMBOL SVR	3. DATE OF REQUEST 20030905	4. WORK REQUEST NO. (For BCE Use)	
5. NAME AND PHONE NO. OF REQUESTER Samuel Manno 7-3217			6. REQUIRED COMPLETION DATE 19 Sep 03	7. BUILDING, FACILITY OR STREET ADDRESS WHERE WORK IS TO BE ACCOMPLISHED Location is on Attached Map Output	
8. DESCRIPTION OF WORK TO BE ACCOMPLISHED (Include Sketch or Plan, when appropriate) Attached					
9. BRIEF JUSTIFICATION FOR WORK TO BE ACCOMPLISHED (Not required for maintenance and repair) Attached					
10. DONATED RESOURCES					
FUNDS		LABOR	MATERIAL	CONTRACT BY REQUESTER	NONE
11. NAME OF REQUESTER Elizabeth Demmons		12. GRADE OF REQUESTER MAJ	13. SIGNATURE OF REQUESTER (See Reverse of Form) 		
14. COORDINATION CEPT		Bi M 8 Sep 03 SGGB	5 SEP 03 CEF JAC	CEV 9/8/03 SVY	MSK 8 Sep 03 ISEG
SECTION II - FOR BASE CIVIL ENGINEER USE					
15. WORK ORDER (Place an "X" in the appropriate box.)					
IN-SERVICE		SELF-HELP	CONTRACT	SABER	
16. DIRECT SCHEDULED WORK (Place an "X" in the appropriate box.)					
EMERGENCY		URGENT	ROUTINE	SELF-HELP	M/C
17. SELF-HELP (Place an "X" in the appropriate box.)					
BRIEFING REQUIRED		ADEQUATE COORDINATION		INSPECTION REQUIRED	
SECTION III - COMPLETE ONLY IF WORK IS TO BE ACCOMPLISHED BY WORK ORDER					
18. WORK CLASS		19. PRIORITY	20. ESTIMATED HOURS	21. ESTIMATED FUNDED COST	22. ESTIMATED TOTAL COST
23. THERE IS NO NEED FOR AN ENVIRONMENTAL ASSESSMENT (AFR 19-2)		24. A WRITTEN ASSESSMENT IS BEING PROCESSED <i>MUST BE</i>		25. APPROVED	26. DISAPPROVED
27. REMARKS AF Form 813 to 319 CES/CEVA. Environmental Analysis is required prior to the start of work. - ENSURE PAINT BALL FIELD LOCATION LAND USE IS COMPATIBLE WITH INRMF.					
SECTION IV - APPROVING AUTHORITY					
28. NAME AND GRADE (Please Type or Print)			29. SIGNATURE		30. DATE

Description of work

I am requesting approval of land on base to place a paint ball field. The area that is requested is pictured on the Map Output attached to this form. The area is located near the BMX track and is currently not in use.

Also, I request 8 signs to be made stating "paintball game in progress do not enter." We will place these signs around the area to ensure no one wanders onto the field during a game.

No additional work to the land is needed. The field will be maintained by the contractor. Any work need to maintain the field will be done by the contractor.

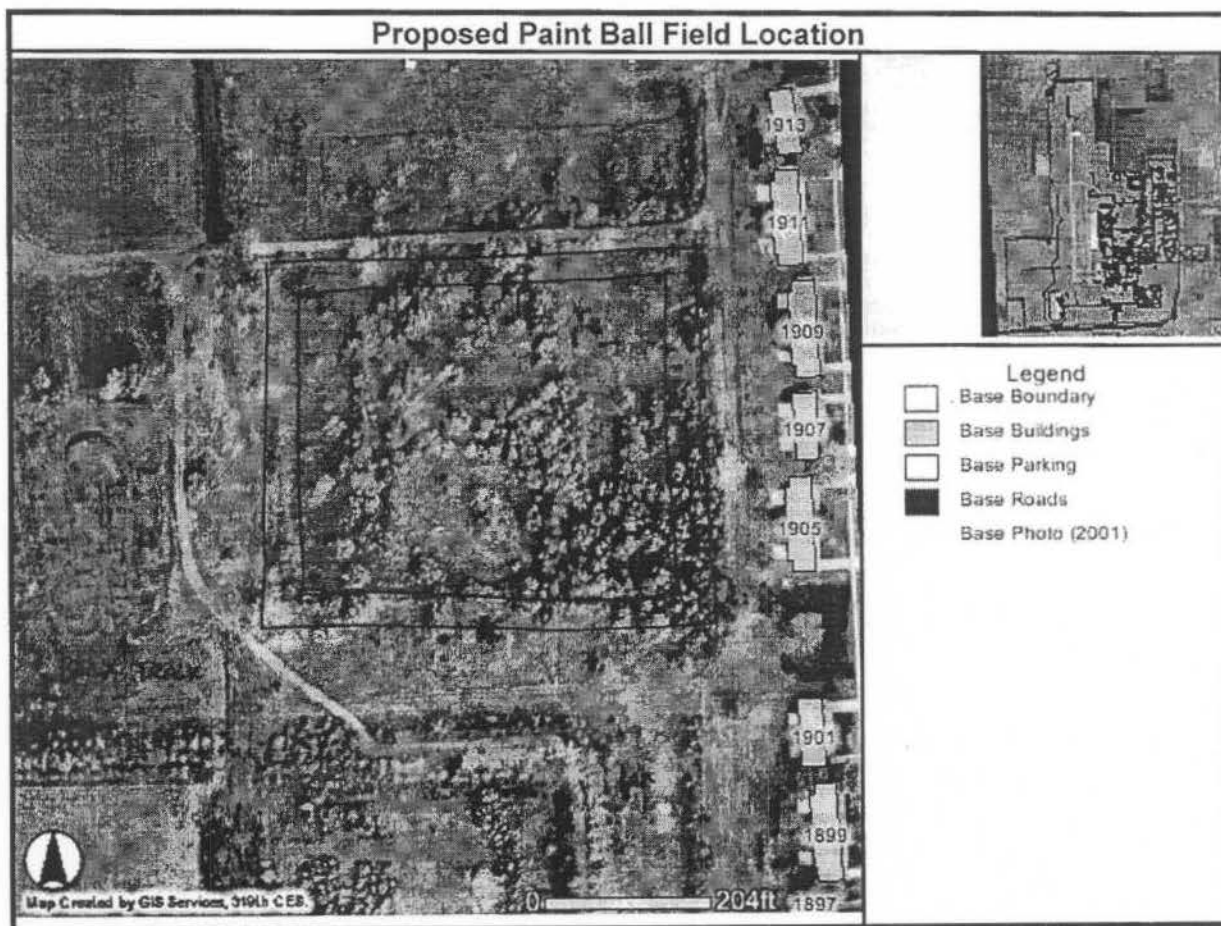
The area is approximately 500ft x 500ft. The playing field itself will be located within this area, approximately 50 ft from the tree lines and or paths on all sides. This area will be clearly marked with a boundary and signs.

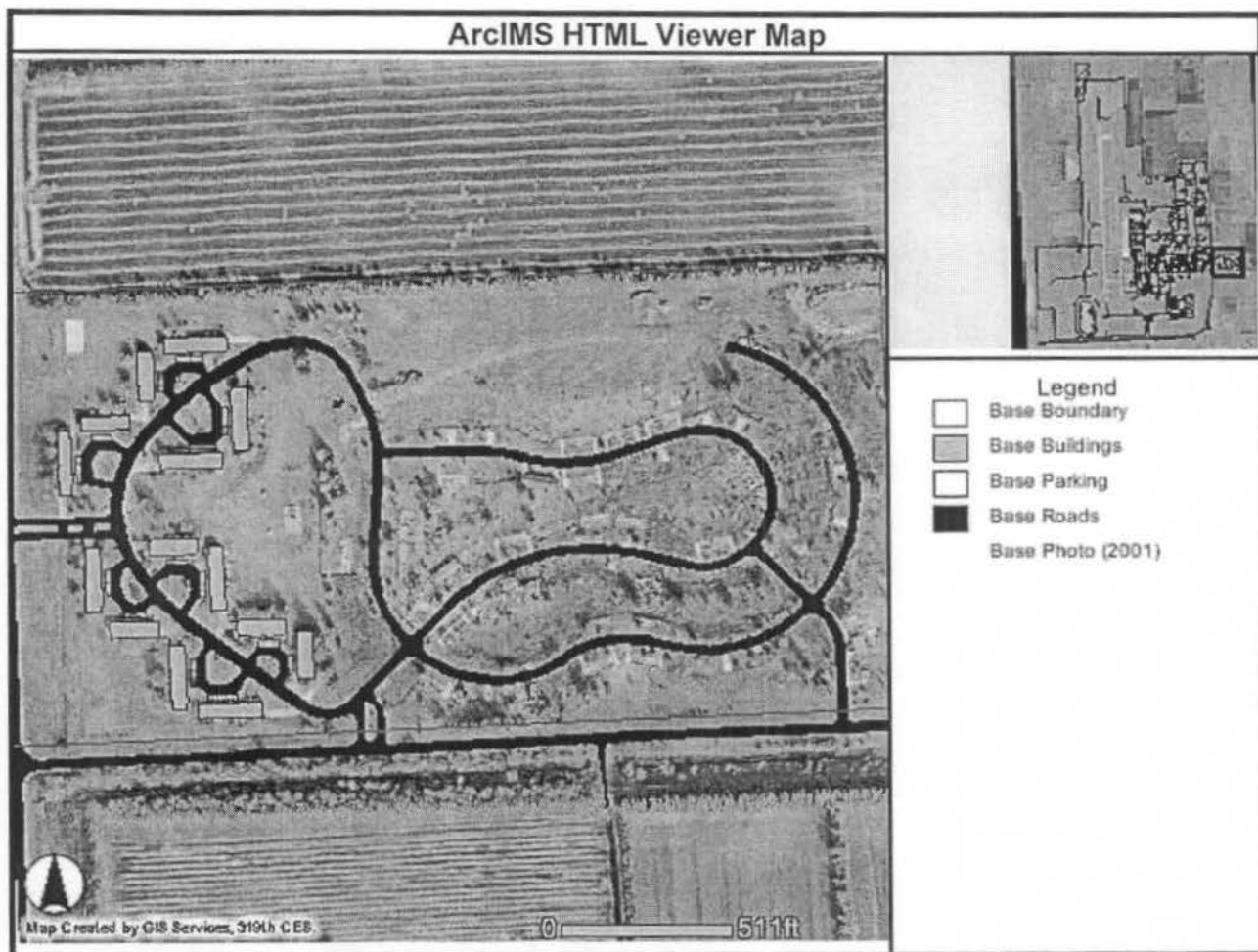
The east boundary of the property is approximately 95ft from housing. We will ensure that the playing field boundary is over 200ft away from housing. A paintball gun propels a paint ball about 50ft. The game itself takes place towards the middle of the playing field. This and the fact that there is a heavy tree line will prevent a stray paint ball making its way to housing.

Five small barricades 3ft high x 4ft wide will be constructed within the playing area. These barricades will be made of wood and will be constructed by the contractor.

Because of the weather we would like to have approval to use the land as soon as possible. The contractor needs time to prepare the field for use. (preparing the field for safety and constructing barricades). Trees will not be cut down.

The field will be used on weekends, Friday, Saturday, Sunday and during the week by appointment only. Security Forces has already said they would use the facility for training purposes.





Description of work

I am requesting approval of land on base to place a paint ball field. The area that is requested is pictured on the Map Output attached to this form. The area is located behind the Sunflake housing area. We would like an area approximately 500ft x 500ft. This area will be clearly marked with a boundary and signs.

Also, I request 8 signs to be made stating "paintball game in progress do not enter." We will place these signs around the area to ensure no one wanders onto the field during a game.

No additional work to the land is needed. The field will be maintained by the contractor. Any work need to maintain the field will be done by the contactor.

Small barricades 3ft high x 4ft wide will be constructed within the playing area. These barricades will be made of wood and will be constructed by the contractor.

Because of the weather we would like to have approval to use the land as soon as possible. The contractor needs time to prepare the field for use. (preparing the field for safety and constructing barricades). Trees will not be cut down.

The field will be used on weekends, Friday, Saturday, Sunday and during the week by appointment only.

Security Forces has already said they would use the facility for training purposes. SFS would like to build a training facility on the property when funding becomes available. This building would be a permanent structure with movable walls.

A description of what a paintball is made of is attached.

Several other military bases already have paintball fields. They include Camp Pendelton, Camp Lajune and Fort Lewis.



DEPARTMENT OF THE AIR FORCE
319TH CIVIL ENGINEER SQUADRON
GRAND FORKS AIR FORCE BASE, NORTH DAKOTA

12 FEB 2004

Wayne A. Koop, R.E.M.
525 Tuskegee Airmen Blvd
Grand Forks AFB ND 58205-6434

Merlan E. Paaverud, Jr.
North Dakota Heritage Center
612 East Boulevard Avenue
Bismarck ND 58505-0830

Dear Mr. Paaverud:

Copies of the location map and cultural resource probability map are provided in response to your, 29 Dec 03, letter concerning the Environmental Assessments for the Construct Miscellaneous Services Recreation Area at Grand Forks AFB, North Dakota (ND SHPO Ref. 97-0527).

These maps, a location map and cultural resource probability map, should have been provided in the initial draft, but were omitted. Please find them enclosed for your review. The recreation area will not overlap any sensitive cultural resource areas.








Sincerely,



WAYNE A. KOOP, R.E.M.
Environmental Management Flight Chief

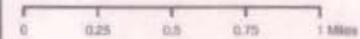
Attachment:
Location map
Cultural resource probability map

Cultural Resources Grand Forks Air Force Base

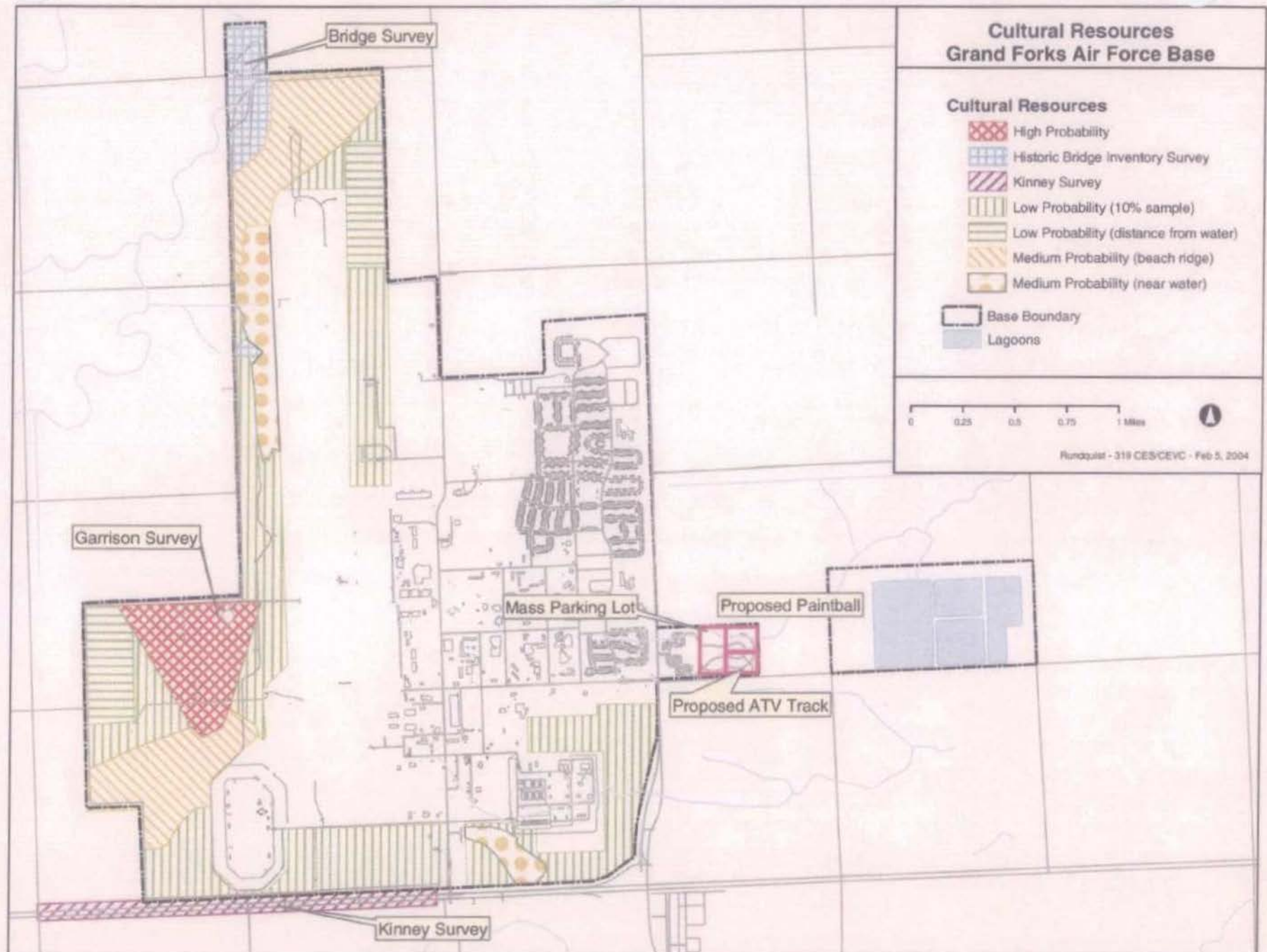
Cultural Resources

-  High Probability
-  Historic Bridge Inventory Survey
-  Kinney Survey
-  Low Probability (10% sample)
-  Low Probability (distance from water)
-  Medium Probability (beach ridge)
-  Medium Probability (near water)

-  Base Boundary
-  Lagoons



Rundquist - 319 CES/CEVC - Feb 5, 2004



1 COMPONENT AF (AMC)	FY 2004 MILITARY CONSTRUCTION DATA	2 DATE 05 Nov 03
3 INSTALLATION AND LOCATION GRAND FORKS AFB, NORTH DAKOTA		
4 PROJECT TITLE ATV Training /Misc. Services Recreation/ Land Use Change/Mass Parking		5 PROJECT NUMBER NA



LOCATION PLAN



DEPARTMENT OF THE AIR FORCE
319TH CIVIL ENGINEER SQUADRON
GRAND FORKS AIR FORCE BASE, NORTH DAKOTA

15 MAR 2004

MEMORANDUM FOR NORTH DAKOTA DIVISION OF COMMUNITY SERVICES
ATTENTION: Jim Boyd
14th Floor State Capitol Building
600 East Blvd
Bismarck ND 58502-0170

FROM: 319 CES/CEV
525 Tuskegee Airmen Blvd
Grand Forks AFB ND 58205-6434

SUBJECT: Finding of No Significant Impact (FONSI)

1. Attached for your information is the FONSI for the construction of a miscellaneous recreation area located to the east side of county road B3 at Grand Forks AFB.
2. The FONSI is being submitted to your office in accordance with Air Force Instruction 32-7061 which requires Grand Forks AFB to notify the OMB Circular Clearing House whenever a FONSI has been completed.
3. If you have any questions concerning this matter please contact Ms. Kristen Rundquist, Natural Resources Manager, 319 CES/CEVC at (701) 747-4774.

WAYNE A. KOOP
Environmental Management Flight Chief

Attachment:
1. FONSI

ROUTING AND TRANSMITTAL SLIP

Date

15 Mar 04

Name, office symbol, room number,
Building, Agency/Post)

Initials

Date

1. CEVS – Ms Tracy Carter

2. CEV – Mr Wayne Koop

5.

	Action	File	Note and Return
	Approval	For Clearance	Per Conversation
	As Requested	For Correction	Prepare Reply
	Circulate	For Your Information	See Me
	Comment	Investigate	Signature
1,2	Coordination	Justify	

REMARKS

Review and sign memorandum to Division of Community Services informing them of the FONSI completed for the miscellaneous recreation area.

DO NOT use this form as a RECORD of approvals, concurrences, disposals,
clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)

Kristen Rundquist, 319 CES/CEVC

Room No. - Bldg. 410

Phone No. 747-4774

OPTIONAL FORM 41 (Rev. 1-94)
Prescribed by GSA

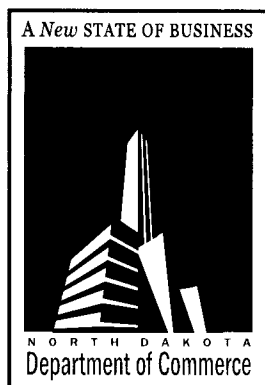
Community Services

Economic

Development & Finance

Tourism

Workforce Development



Center

1600 E. Century Ave

Suite 2

PO Box 2057

Bismarck, ND 58502-2057

Phone 701-328-5300

Fax 701-328-5320

www.ndcommerce.com



File 628
RCS 2004-029

March 18, 2004

**Wayne Koop
Dept. of the Air Force
319 CES/CEV
525 Tuskegee Airman Blvd.
Grand Forks AFB, ND 58205-6434**

**"Letter of Clearance" In Conformance with the North Dakota Federal Program
Review System - State Application Identifier No.: ND040318-0081**

Dear Mr. Koop:

SUBJECT: FONSI - Construction of Miscellaneous Recreation Area

**The above referenced FONSI has been reviewed through the North Dakota Federal
Program Review Process. As a result of the review, clearance is given to the project
only with respect to this consultation process.**

**If the proposed project changes in duration, scope, description, budget, location or
area of impact, from the project description submitted for review, then it is necessary
to submit a copy of the completed application to this office for further review.**

**We also request the opportunity for complete review of applications for renewal or
continuation grants within one year after the date of this letter.**

**Please use the above SAI number for reference to the above project with this office.
Your continued cooperation in the review process is much appreciated.**

Sincerely,

A handwritten signature in black ink that reads "James R. Boyd".

**James R. Boyd
Manager of Governmental Services**

sf